

## APPENDIX J

### SUMMARY OF COMMENTS IN CC DOCKET NO. 96-45

#### I. INTRODUCTION

#### II. EXECUTIVE SUMMARY

#### III. PRINCIPLES

##### A. Overview

1. The following is a summary of comments relating to the issue of principles.

##### B. Comments

2. 1996 Act Principles. Commenters generally support the guiding principles identified under section 254(b), with some commenters stating various preferences for prioritization of those goals.<sup>1</sup> Others emphasize those goals related to access to services.<sup>2</sup> No comments were received in opposition to the establishment of these enumerated principles.

3. In addition to the principles enumerated above, numerous comments were filed regarding additional principles that should guide the Commission when addressing universal service issues.<sup>3</sup> These proposed additional principles are set forth below.

4. Competitive Neutrality. A majority of commenters addressing this issue advocate adopting competitive neutrality as an additional principle to shape policies governing universal service.<sup>4</sup> A few commenters advocate specific definitions of competitive neutrality that emphasize application of universal service rules and mechanisms in a manner that does not advantage or disadvantage one provider of telecommunications services over another.<sup>5</sup> Others emphasize competitively neutral contribution, distribution, and determination of eligibility for

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<sup>1</sup> See, e.g., ALTS comments at 1; GCI comments at 2; GTE comments at 7; Motorola reply comments at 3.

<sup>2</sup> See, e.g., John Staurulakis comments at 4 (discussing need for rural consumers to have access to telecommunications services); MFS comments at 3-5 (discussing importance of access to advanced telecommunications and information services in all regions of the Nation); NAD comments at 7-8 (discussing need for access to advanced services by individuals with disabilities); United Church of Christ comments at 1-2 (discussing reasonably comparable access by rural consumers both in terms of quality and timeliness).

<sup>3</sup> See 47 U.S.C. § 254(b)(7) regarding additional principles.

<sup>4</sup> See, e.g., ALTS comments at 3-5; AT&T comments at 2, 4; GTE comments at 7-8, 11; MCI comments at 1; Nextel comments at 2; Sprint comments at 6-7.

<sup>5</sup> See, e.g., GTE comments at 12; MFS comments at 2; NCTA comments at 12; SBC comments at 6.

universal service support.<sup>6</sup> ALTS contends that the Joint Board's definition of competitive neutrality should be broadened to include the concept of a competitively neutral administrator and that rules and regulations themselves, not just application of the rules, should be competitively neutral.<sup>7</sup> Commenters also cite congressional intent to promote competition in the advancement of telecommunications services.<sup>8</sup> Several commenters advocate inclusion of technological neutrality as a concept related to the principle of competitive neutrality.<sup>9</sup> They contend that the Commission should avoid defining any particular service or technology that must be available and supported by universal service support mechanisms and allow the marketplace to shape the direction of technology.<sup>10</sup>

5. Some commenters focus on the effect of a principle of competitive neutrality on rural areas. Evans Tel. contends that Congress adopted "rural safeguard" provisions in the 1996 Act in the form of statutory advantages and protections to rural telephone companies not provided to competitors. These provisions, according to Evans Tel., were designed to protect universal service in areas served by small, rural telephone companies from competition in the absence of such safeguards that could threaten rural service rates and quality standards.<sup>11</sup> Therefore, Evans Tel. and other commenters assert, competitive neutrality can enter into universal service only as a secondary consideration - subordinate to the specific principles identified in the 1996 Act.<sup>12</sup> RTC contends that Congress understood that rural conditions require special scrutiny "even where pro-competitive measures are concerned" and that Congress balanced the policies of rural competition and universal service in the 1996 Act.<sup>13</sup>

6. A few commenters contend that a principle of competitive neutrality is unnecessary or inconsistent with section 254.<sup>14</sup> Western Alliance asserts that the section 254(b)

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<sup>6</sup> See, e.g., Bell South comments at 9-11; CompTel comments at 4-6; MCI comments at 1; Washington UTC comments at 1-2; WorldCom comments at 5.

<sup>7</sup> ALTS comments at 4-5.

<sup>8</sup> See, e.g., Cox comments at 5-6; GTE comments at 7-8, 11; Motorola reply comments at 16-17.

<sup>9</sup> See, e.g., MCI comments at 1; NorTel comments at 1-2; Oracle comments at 12-13; PageNet comments at 2; APC reply comments at 4; Motorola reply comments at 16-17.

<sup>10</sup> See, e.g., NorTel comments at 2-3; Oracle comments at 13; Motorola reply comments at 17.

<sup>11</sup> Evans Tel. comments at 12, 14.

<sup>12</sup> See Evans Tel. comments at 12; ITC comments at 3; Minnesota Coalition comments at 3. See also RTC comments at 32-33 (contending that giving equal weight to principle of competitive neutrality would fail to meet requirement of section 254(b)(7) that additional principles be "necessary and appropriate for the protection of the public interest" for rural areas).

<sup>13</sup> RTC comments at 33.

<sup>14</sup> See, e.g., TCA comments at 2; Western Alliance comments at 4.

principles make it clear that universal service is intended to be a safeguard against competitive excesses and market failures.<sup>15</sup> They further assert that, given the express reference to competitive neutrality in section 254(h)(2), the lack of any reference to competitive neutrality in the general provisions of section 254(b) demonstrates a conscious decision by Congress not to include competitive neutrality as a principle.<sup>16</sup>

7. TCA contends that the concept of competitive neutrality already is embodied in the 1996 Act and, therefore, is not needed as an additional principle.<sup>17</sup> Wyoming PSC contends that if competitive neutrality permits diminished emphasis on affordable universal service in rural and high cost areas where market forces dictate such a result, then the principle runs against the express policy of the 1996 Act and should not be allowed.<sup>18</sup>

8. Americans with Disabilities. Some commenters urge the Commission to address specific issues faced by Americans with disabilities pursuant to the provisions of section 254.<sup>19</sup> NAD contends that, while individuals with disabilities are covered by section 255, reliance upon section 255 to ensure basic access to the public switched network by individuals with disabilities who must purchase specialized customer premises equipment (SCPE) is misplaced.<sup>20</sup> Specifically, NAD contends that universal service support is needed to fund SCPE for individuals with disabilities.<sup>21</sup> Commenters also contend that individuals with speech disabilities who use Alternative and Augmentive Communications (AAC) pay more for end-user access to telecommunications services than does the general public due to the increased response time required by AAC device users.<sup>22</sup> Commenters request universal service support to bring toll charges for both text telephone (TTY) and telecommunications relay service users in line with other toll charges based on the longer than average calls associated with the use of these services.<sup>23</sup>

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<sup>15</sup> Western Alliance comments at 10.

<sup>16</sup> Western Alliance comments at 10-11.

<sup>17</sup> TCA comments at 2. *See also* Fred Williamson comments at 3.

<sup>18</sup> Wyoming PSC comments at 4.

<sup>19</sup> *See, e.g.*, NAD comments at 4-5 (discussing need for parity of TTY calls); United Cerebral Palsy Ass'n comments at 3 (discussing need to broaden principles to include persons with disabilities under universal service).

<sup>20</sup> NAD comments at 3.

<sup>21</sup> NAD comments at 2. *See also* United Cerebral Palsy Ass'n comments at 5.

<sup>22</sup> United Cerebral Palsy Ass'n comments at 5-7. *See also* NAD comments at 3-4; Universal Service Alliance comments at 5-7.

<sup>23</sup> *See, e.g.*, NAD comments 4; United Cerebral Palsy Ass'n comments at 7-8; Universal Service Alliance comments at 6.

9. Additional Protection for Specific Groups. Public Advocates suggests as an additional goal that, in each state, carriers should work to achieve the statewide average rate of subscribership among that state's low-income, minority, and limited English-speaking communities.<sup>24</sup>

10. Schools and Libraries. Some commenters suggest that allowing community-based organizations providing educational, health, and literary services to receive the same full and equal access to advanced services as libraries and schools should be a principle that stems from section 254(b).<sup>25</sup>

11. Other Suggested Principles. Bar of New York advocates including an additional principle expressly promoting access to interactive services.<sup>26</sup> GSA recommends that "economic efficiency" be recognized as a principle.<sup>27</sup> A few commenters also contend that the Commission should adopt a principle of minimizing the growth and overall size of the universal service support mechanisms.<sup>28</sup>

#### **IV. DEFINITION OF UNIVERSAL SERVICE: WHAT SERVICES TO SUPPORT**

##### **A. Overview**

12. The following is a summary of the comments on the issue of what services should be included in the definition of universal service under section 254(c)(1).

##### **B. Designated Services**

###### **1. Comments**

13. General Comments. Catholic Conference agrees with the Joint Board's conclusion that all four criteria enumerated in section 254(c)(1) must be considered, but not necessarily met, before a service may be included within the definition of universal service.<sup>29</sup> Benton suggests that the Commission adopt a universal service system defined by transport and

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<sup>24</sup> Public Advocates comments at 3.

<sup>25</sup> Alliance for Community Media comments at 6-9; Public Advocates comments at 4-5.

<sup>26</sup> Bar of New York comments at 3.

<sup>27</sup> GSA comments at 3.

<sup>28</sup> See, e.g., Sprint PCS comments at 2-4; APC reply comments at 1; PCIA reply comments at 27.

<sup>29</sup> Catholic Conference comments at 6.

termination requirements rather than services.<sup>30</sup> As defined by Benton, transport requirements concerning the "quality and capacity of telephony media" (such as the provision of single-party service or the capability of providing fax/data service at specified speeds), the distribution of those media, and termination requirements mandate that carriers connect with a specified destination on demand (for example, equal access to interexchange carriers).<sup>31</sup> According to Benton, this approach would permit the Commission to adopt "policies without either specifying or implying specific facilities, architecture, or network topography and the carriers that are traditionally associated with those elements."<sup>32</sup>

14. Services Proposed in the Recommended Decision. Various commenters concur with the Joint Board's recommended list of services to be supported by universal service support mechanisms.<sup>33</sup> GSA contends that the services proposed for support by the Joint Board encompass the "minimum group of services that should be available to all consumers."<sup>34</sup> In contrast, People For asserts that the Joint Board failed to recommend a sufficiently broad definition of universal service that would "fulfill Congress' mandate to ensure full participation in the information age."<sup>35</sup>

15. Voice Grade Access to the Public Switched Network. Bar of New York asserts that the Joint Board's recommendation that voice grade access occur at approximately 3,500 Hertz will not ensure residential consumers access to interactive services, which, it argues, requires greater bandwidth.<sup>36</sup> Bar of New York cites the Recommended Decision's conclusion in connection with rural health care providers that services such as video-on-demand, medical imaging, two-way interactive distance learning and high definition television (HDTV) might require bandwidth of 1.544 Mbps.<sup>37</sup> Thus, Bar of New York argues that the benefits of broadband interactive services warrant support for increased bandwidth.<sup>38</sup> MFS asserts that the Commission should assure universal access to advanced services, including the capability to support data transmissions of at least 1 Mbps, by adopting the network standards established by

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<sup>30</sup> Benton comments at 2.

<sup>31</sup> Benton comments at 2.

<sup>32</sup> Benton comments at 2.

<sup>33</sup> See, e.g., GSA comments at 8-9; ITI comments at 2; Teleport comments at 3; United Utilities comments at 2; APC reply comments at 5; Business Software Alliance reply comments at 8.

<sup>34</sup> GSA comments at 8-9.

<sup>35</sup> People For comments at 3-4.

<sup>36</sup> Bar of New York comments at 10.

<sup>37</sup> Bar of New York comments at 9-10 (*citing* Recommended Decision, 12 FCC Rcd at 419-421).

<sup>38</sup> Bar of New York comments at 8-10.

Congress for carriers that borrow from the Rural Utilities Service (RUS) under the Rural Electrification Restructuring Act of 1993 (RELRA).<sup>39</sup>

16. Local Usage. Ameritech, arguing that states should support local usage through their own universal service mechanisms, contends that a variable usage component should not be funded through federal support mechanisms.<sup>40</sup> According to Ameritech, if the Commission includes a variable usage component within the definition of voice grade access, states would be encouraged to designate a high level of local usage for support in their respective jurisdictions in order to maximize the benefits their constituents receive from federal universal service support mechanisms.<sup>41</sup> In contrast, Ohio PUC maintains that support for local usage is essential to realizing the full benefits of voice grade access and further contends that a local usage component meets the four criteria set forth in section 254(c)(1).<sup>42</sup> Ohio PUC advocates that the states, rather than the Commission, be responsible for establishing minimum local usage levels in their respective jurisdictions.<sup>43</sup>

17. United Utilities argues against the establishment of a local usage sensitive support mechanism because, it contends, such a mechanism would require carriers that do not offer measured service to eliminate flat, non-usage based rates and require those carriers to purchase new switches and software and implement new billing systems.<sup>44</sup> United Utilities contends that, if the Commission elects to limit the amount of support for local usage, the Commission should apply such a limitation only to non-rural carriers that use measured service and "exempt [the rural carrier] from having to limit the amount of local usage that customers receive in order to be able to receive the full amount of universal service funding that the carrier is otherwise entitled to receive."<sup>45</sup>

18. DTMF Signaling. NENA favors including DTMF signaling among the services to be supported because, NENA argues, DTMF signaling "is an important means of speeding calls where seconds saved may save lives and property in emergencies."<sup>46</sup>

19. Access to Emergency Services. NENA concurs with the Joint Board's

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<sup>39</sup> MFS comments at 5-11.

<sup>40</sup> Ameritech comments at 5.

<sup>41</sup> Ameritech comments at 5.

<sup>42</sup> Ohio PUC reply comments at 2.

<sup>43</sup> Ohio PUC reply comments at 2.

<sup>44</sup> United Utilities comments at 6.

<sup>45</sup> United Utilities comments at 6.

<sup>46</sup> NENA comments at 1-2.

recommendation to include access to emergency services, including access to 911, among the supported services.<sup>47</sup> TCA contends that by adopting the Joint Board's recommendation to exclude access to enhanced 911 (E911) service from the list of supported services, the Commission would be giving wireless providers a competitive advantage over providers that can or must offer this service.<sup>48</sup> Similarly, Western Alliance opposes what it characterizes as the Joint Board's failure to recognize the potential benefit provided by E911 in favor of ensuring that potential wireless competitors could receive universal service support.<sup>49</sup> TCA favors supporting access to E911 service, as well as E911 service itself, when it is requested by the local community.<sup>50</sup>

20. Access to Directory Assistance and White Pages Directories. USTA urges the Commission to include white pages directories within the definition of universal service because, it argues, white pages directories meet the statutory criteria for inclusion and serve the public interest by making this information available to consumers.<sup>51</sup> West Virginia Consumer Advocate "strongly disagrees" with the Joint Board's decision against recommending that white pages directories be supported because it contends that the Joint Board's recommendation to exclude white pages directories is inconsistent with its recommendation to support access to directory assistance.<sup>52</sup> West Virginia Consumer Advocate asserts that, like access to directory assistance, white pages directories are a "fundamentally important offering" that, while not a "telecommunications service" *per se*, are "necessary for consumers to access telecommunications and information services."<sup>53</sup> Oregon PUC argues that, if the Commission decides to exclude white pages listings from the list of supported services, the Commission should require carriers to include all of their subscribers in their directory assistance databases.<sup>54</sup> In contrast, Georgia PSC asserts that white pages directories do not come within the Act's definition of "telecommunications services" and, therefore, supports the Joint Board's recommendation to exclude white pages directories from the list of supported services.<sup>55</sup>

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<sup>47</sup> NENA comments at 1.

<sup>48</sup> TCA comments at 3.

<sup>49</sup> Western Alliance comments at 12.

<sup>50</sup> TCA comments at 3.

<sup>51</sup> USTA comments at 31.

<sup>52</sup> West Virginia Consumer Advocate comments at 2. *See also* Ohio PUC comments at 5; CWA reply comments at 4.

<sup>53</sup> West Virginia Consumer Advocate comments at 3 (*citing* Recommended Decision, 12 FCC Rcd at 122-123).

<sup>54</sup> Oregon PUC comments at 2-3.

<sup>55</sup> Georgia PSC reply comments at 8.

21. Access to Operator Service. CWA argues that access to operator service should include "initial contact with a live operator," which, it contends, is "indispensable for users in public health or safety emergencies."<sup>56</sup>

22. Access to Interexchange Service. USTA supports the Joint Board's recommendation that the Commission include access to interexchange service within the definition of universal service.<sup>57</sup> GCI opposes providing universal service support for access to interexchange service on the grounds that interexchange service is competitive and is not currently subsidized.<sup>58</sup>

23. Equal Access to Interexchange Service. Ameritech argues that the principle of competitive neutrality requires that, in areas where the incumbent LEC has the obligation to offer equal access to interexchange service providers, other carriers receiving universal service support in that area also should be obligated to provide equal access.<sup>59</sup> Noting that incumbent LECs have incurred costs associated with upgrading their networks to offer equal access and that end-user customers have come to expect this service, GVNW and TCA contend that the principle of competitive neutrality mandates that competitors be required to offer equal access.<sup>60</sup> GVNW urges the Commission to include equal access in the definition of universal service and establish an implementation deadline by which all eligible carriers must provide such access.<sup>61</sup> Western Alliance maintains that the exclusion of equal access from the list of core services would ensure that wireless carriers qualify for universal service support at the expense of rural consumers who, as a result of such a determination, may be denied the substantial benefits of equal access.<sup>62</sup> WorldCom asserts that the Joint Board's recommendation not to support equal access is inconsistent with the principle of competitive neutrality in that it favors one discrete class of carriers over all other carriers that seek to provide equal access as part of universal service.<sup>63</sup> WorldCom recommends that the Commission either: 1) support equal access only to the extent that eligible carriers are able to provide it; or 2) support equal access "across the board" but permit CMRS providers to file for waivers from this requirement.<sup>64</sup>

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<sup>56</sup> CWA reply comments at 4.

<sup>57</sup> USTA comments at 31.

<sup>58</sup> GCI reply comments at 10-11.

<sup>59</sup> Ameritech comments at 6. *See also* ITC comments at 10; Ohio PUC reply comments at 3.

<sup>60</sup> GVNW comments at 4-5; TCA comments at 3. *See also* WorldCom comments at 10.

<sup>61</sup> GVNW comments at 5.

<sup>62</sup> Western Alliance comments at 11-12.

<sup>63</sup> WorldCom comments at 10.

<sup>64</sup> WorldCom comments at 10-11.



24. CTIA and Vanguard argue that wireless carriers should not be required to provide services or functionalities, such as equal access, that they are not currently able or required to provide.<sup>65</sup> Similarly, PCIA contends that the Joint Board properly recognized that, under section 332(c)(8), CMRS providers are not "required to provide equal access to common carriers for the provision of toll services."<sup>66</sup> Vanguard asserts that including equal access within the list of supported services would be inconsistent with Congress's intent to maximize consumer choice because doing so would limit the ability of CMRS providers to offer universal service in areas where they are best equipped to provide service.<sup>67</sup> PCIA asserts that because sections 332(c)(8) and 254 were enacted together as part of the 1996 Act, the Commission must interpret these sections under principles of statutory construction so that neither is nullified.<sup>68</sup> By exempting CMRS providers from equal access obligations while creating a universal service program consistent with section 254, PCIA asserts that the Joint Board's recommendation represents a permissible construction of the two provisions.

25. Advanced Services. APC and Business Software Alliance concur with the Joint Board's recommendation that the Commission not support advanced services such as ISDN, end-to-end digital service and call waiting on the theory that the Commission must carefully choose the services designated for support in order to limit the overall size of the universal service support mechanisms.<sup>69</sup> In contrast, ITC argues that the statutory principle of "access to advanced services" is missing from the proposed definition of supported services.<sup>70</sup> ITC contends that supporting access to advanced services for schools and libraries, but not for carriers serving consumers in high cost areas, discriminates against "family and economic institutions of society" in favor of educational institutions.<sup>71</sup> People For contends that the statutory principle promoting "access to advanced telecommunications and information services" provides authority for the Commission to support services and functionalities such as modern network facilities, Internet access availability, call tracing, and 900-number blocking services.<sup>72</sup> Bar of New York contends that, if access charge reform does not result in a system that permits differential pricing for voice and data calls, universal service support might be necessary to ensure access to interactive

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<sup>65</sup> CTIA reply comments at 10; Vanguard reply comments at 4.

<sup>66</sup> PCIA reply comments at 30 (*citing* Recommended Decision, 12 FCC Rcd at 122 n.194). *See also* Vanguard reply comments at 5.

<sup>67</sup> Vanguard reply comments at 5.

<sup>68</sup> PCIA reply comments at 31.

<sup>69</sup> APC comments at 5; Business Software Alliance comments at 8.

<sup>70</sup> ITC comments at 10.

<sup>71</sup> ITC comments at 10; ITC reply comments at 7.

<sup>72</sup> People For comments at 4.

services.<sup>73</sup> Urban League advocates including fax and modem capability, the latter of which will ensure all Americans have the ability to use electronic mail, in the definition of universal service.<sup>74</sup>

26. Iowa Utilities Board states that "advanced telecommunications and information services" should include Internet service and that the Commission should establish incentives to encourage access to Internet facilities for communities in rural areas.<sup>75</sup> Arguing that information service providers merely provide conduit, and not content, People For opposes the Joint Board's conclusion that Internet access is not a "telecommunications service."<sup>76</sup> Accordingly, People For urges the Commission to reject the Joint Board's recommendation and include Internet service within the definition of universal service.<sup>77</sup> In the alternative, People For requests that the Commission define Internet service as a "telecommunications service" not presently designated for universal service support.<sup>78</sup>

27. Taking issue with the view expressed by People For, NCTA contends that Internet access is not a telecommunications service.<sup>79</sup> NCTA asserts that the Joint Board correctly recognized that information and enhanced services provided over the facilities of common carriers are treated, for regulatory purposes, as separate and distinct from the basic telecommunications capacity used to transmit those services.<sup>80</sup> Whereas a common carrier's basic transmission capacity is a telecommunications service that must be made available to any information service provider under tariff, NCTA maintains, a common carrier's Internet access service is not a telecommunications service.

28. Other Services. Catholic Conference advocates supporting voice messaging services for individuals without residences and contends that this service meets each of the criteria enumerated in section 254(c)(1).<sup>81</sup> CWA recommends that the Commission add "prompt

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<sup>73</sup> Bar of New York comments at 13.

<sup>74</sup> Urban League comments at 9.

<sup>75</sup> Iowa Utilities Board comments at 8-9.

<sup>76</sup> People For comments at 5 (*citing* S. Rep. No. 23, 104th Cong., 1st Sess. 18 (1995)).

<sup>77</sup> People For comments at 5-6.

<sup>78</sup> People For comments at 6.

<sup>79</sup> NCTA reply comments at 3-4.

<sup>80</sup> NCTA reply comments at 4.

<sup>81</sup> Catholic Conference comments at 5-6. The issue of voice messaging services for individuals without residences is discussed in section VIII *infra*.

access to repair bureaus and business offices" to the list of supported services.<sup>82</sup>

29. Universal Service Alliance urges the Commission to reject the Joint Board's recommendation to exclude consideration of disabilities-related issues and to provide universal service support to make specialized customer premises equipment, such as TTYs, telephone signaling devices, telebraille machines and volume control telephones, accessible and affordable to consumers with disabilities in all states.<sup>83</sup> In addition, Universal Service Alliance favors supporting toll charges associated with TTY and relay service calls.<sup>84</sup> Universal Service Alliance argues that, contrary to the Joint Board's representation, the Commission's proceeding to implement section 255 is narrowly focused on making telecommunications equipment usable by consumers with disabilities and does not encompass numerous issues raised by the section 254 mandate that all persons have access to basic and advanced telecommunications services.<sup>85</sup>

30. Offering Supported Services on a Stand-Alone Basis. GTE suggests that eligible carriers should be required to offer the services designated for support under section 254(c)(1) on a "stand-alone" basis and at an "affordable" price, and Ameritech, TCA and CWA concur with this proposal.<sup>86</sup> GTE states that this requirement would prevent carriers from "cherry picking" select customers by offering the designated services only in conjunction with other, higher priced services.<sup>87</sup>

31. Treatment of Wireless Providers. TCA generally contends that wireless providers receive preferential treatment in the Joint Board's recommended definition of universal service.<sup>88</sup> CTIA urges the Commission to reject the arguments of TCA and others because, CTIA argues, by advocating an expansive list of services required of eligible telecommunications providers, these parties seek to prevent wireless providers from becoming eligible for universal service support.<sup>89</sup>

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<sup>82</sup> CWA comments at 4.

<sup>83</sup> Universal Service Alliance comments at 6; Universal Service Alliance reply comments at 4-5.

<sup>84</sup> Universal Service Alliance comments at 6; Universal Service Alliance reply comments at 5. *See also* Consumer Action reply comments at 5.

<sup>85</sup> Universal Service Alliance comments at 7.

<sup>86</sup> GTE comments at 16; GTE reply comments at 14-16. *Accord* Ameritech comments at 9 n.15; Ameritech comments, app. A at 14-15 ("it would be virtually impossible to police the marketing plans of multiple providers . . . to ensure that information on competitive offerings is not selectively targeted . . ."); TCA comments at 3-4; CWA reply comments at 9-10.

<sup>87</sup> GTE comments at 16.

<sup>88</sup> TCA comments at 2. *See also* Western Alliance comments at 11-12.

<sup>89</sup> CTIA reply comments at 9.

## **C. Feasibility of Providing Designated Services**

### **1. Comments**

32. Limitations on Carriers' Ability to Provide Designated Services. CTIA asserts that it is unfair to require wireless providers to offer E911 service at present in light of the Commission's recent decision in CC Docket 94-102 to give wireless carriers a five-year grace period in which to complete the technical upgrades necessary to achieve E911 capability.<sup>90</sup> According to CTIA, requiring eligible carriers to provide E911 service would not only exclude wireless carriers from becoming eligible for support in the near term, but would also undermine the Commission's decision in CC Docket 94-102.<sup>91</sup>

33. Transition Period for Conversion to Single-Party Service. GTE argues that additional state commission action should not be necessary to authorize universal service support for party-line customers when a state regulatory agency has previously established a transition period for offering single-line capability that extends beyond January 1, 1998, the recommended date for implementation of the new high cost support mechanisms.<sup>92</sup> In addition, GTE, referring to the Joint Board's recommendation that "carriers may offer consumers the choice of multi-party service in addition to single-party service and remain eligible for universal service support," urges the Commission to clarify that carriers will remain eligible for universal service support not only for single-line customers, but also for each party-line customer that is offered single-line service, but chooses to subscribe to party-line service.<sup>93</sup> GTE maintains that carriers should not bear the burden of initiating a proceeding before state commissions when customers choose party-line service.<sup>94</sup>

## **D. Extent of Universal Service Support**

### **1. Comments**

34. Limiting Support for Services Carried on a Single Residential Connection. There is considerable record support for the Joint Board's recommendation not to support additional residential connections.<sup>95</sup> PageMart argues that supporting the provision of multiple lines is a

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<sup>90</sup> CTIA reply comments at 9.

<sup>91</sup> CTIA reply comments at 9.

<sup>92</sup> GTE comments at 84.

<sup>93</sup> GTE comments at 83.

<sup>94</sup> GTE comments at 84.

<sup>95</sup> See, e.g., Ameritech comments at 6; APT comments at 5; California PUC comments at 2; Cox Communications comments at 4; Maryland PSC comments at 9; PageMart comments at 6; Motorola reply

benefit that extends "far beyond the universal service mandate to connect the greatest number of residences to the telephone system."<sup>96</sup> Cox argues that second connections do not promote universal service goals because they are not necessary to ensure access to the telephone network.<sup>97</sup> In addition, Cox contends that second lines should not be supported because they are a "significant source of profits to telephone companies."<sup>98</sup> According to Cox, it costs little to provide a second line because conventional loops have the capacity to provide two lines when they are installed, but telephone companies generally charge the same amount for a second line as they do for the first.<sup>99</sup> Sprint asserts that giving ILECs flexibility in pricing second lines will eliminate the need for universal service support for second lines.<sup>100</sup>

35. Ad Hoc, arguing against support for additional lines, contends that there is no evidence that the number of consumers who subscribe to secondary lines constitute a "substantial majority" pursuant to section 254(c)(1)(B).<sup>101</sup> Further, Ad Hoc argues, even if a "substantial majority" of consumers subscribes to a second line, such additional lines should not be supported because they are not "essential to education, public health, or public safety" consistent with section 254(c)(1)(A).<sup>102</sup> According to Ad Hoc, secondary lines have never been a core universal service and excluding them from support is consistent with past and present universal service policy.<sup>103</sup> In addition, Ad Hoc characterizes as "speculative" arguments that carriers have difficulty differentiating between primary and secondary lines.<sup>104</sup> According to Ad Hoc, billing systems are presently capable of distinguishing between primary and secondary residential lines or can be modified to add this capability.<sup>105</sup> Time Warner proposes that the universal service

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comments at 9; PageNet reply comments at 7-8; PCIA reply comments at 25.

<sup>96</sup> PageMart reply comments at 4.

<sup>97</sup> Cox comments at 4. *See also* Time Warner reply comments at 18.

<sup>98</sup> Cox comments at 4-5 (*citing* "Pacific Telesis Earnings Grow in Third Quarter," Pacific Telesis Press Release, Oct. 17, 1996, for the proposition that additional lines increased 105 percent over the previous year).

<sup>99</sup> Cox comments at 4.

<sup>100</sup> Sprint reply comments at 6.

<sup>101</sup> Ad Hoc reply comments at 3 (approximately 15 percent of households with telephones had additional lines as of the end of 1995 according to FCC Industry Analysis Division, *Percentage Additional Residential Lines for Households with Telephone Service*, 1996).

<sup>102</sup> Ad Hoc reply comments at 3.

<sup>103</sup> Ad Hoc reply comments at 4.

<sup>104</sup> Ad Hoc reply comments at 3-4.

<sup>105</sup> Ad Hoc reply comments at 4.

administrator and carriers work together to address administrative issues.<sup>106</sup> Specifically, Time Warner contends, without further elaboration, that assigning one customer voucher "per household in an eligible area" would eliminate the need for the universal service administrator to track "a customer's migration from one carrier to another."<sup>107</sup> Time Warner argues that, under this approach, "it would not matter which of multiple carriers serving the high-cost customer was providing the primary line and which was providing the second line."<sup>108</sup>

36. Sprint and Teleport suggest that the Commission use a customer certification method to identify primary lines that are eligible for high cost support.<sup>109</sup> Specifically, Teleport suggests a plan wherein customers should designate one carrier as their primary local exchange carrier.<sup>110</sup> Under this plan, support would be provided to the carrier designated by the customer for the provision of the designated services carried on one connection.<sup>111</sup> Teleport further suggests that customer information already maintained by local exchange and interexchange carriers in the Customer Account Record Exchange ("CARE") database be used in conjunction with information relating to high cost areas included in the cost models to create a Universal Service Database ("USDB").<sup>112</sup> According to Teleport, the CARE database, which includes the service address for every customer in a local exchange carrier's service territory, is automated and readily available.<sup>113</sup> Teleport suggests that the fund administrator check each carrier's request for funding for a particular address against the records in the USDB to determine the validity of the request.<sup>114</sup> Using this approach, multiple support requests for one address or requests for addresses not in the USDB would be denied pending further investigation by the administrator, with state commission and FCC intervention required only in disputed cases.<sup>115</sup> Teleport recommends that the universal service administrator or another entity designated by the

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<sup>106</sup> Time Warner reply comments at 19.

<sup>107</sup> Time Warner reply comments at 19.

<sup>108</sup> Time Warner reply comments at 19.

<sup>109</sup> Sprint reply comments at 5; Teleport reply comments at 4. *See also* GTE comments at 81; Time Warner reply comments at 18.

<sup>110</sup> Letter from Paul E. Cain, Teleport, to Pamela Gallant, Common Carrier Bureau, dated February 18, 1997 (Teleport February 18 *ex parte*).

<sup>111</sup> Teleport February 18 *ex parte* at 2.

<sup>112</sup> Teleport February 18 *ex parte* at 2.

<sup>113</sup> Teleport February 18 *ex parte* at 2.

<sup>114</sup> Teleport February 18 *ex parte* at 2.

<sup>115</sup> Teleport February 18 *ex parte* at 1.

Commission conduct periodic, random audits to discourage fraud.<sup>116</sup> Teleport urges the Commission not to countenance the misuse of universal service support simply because it may be impossible to identify and punish every instance of fraud.<sup>117</sup>

37. Similarly, MFS proposes a plan wherein customers who are served by more than one carrier designate one carrier as their primary local exchange carrier for universal service purposes.<sup>118</sup> Under the MFS proposal, the fund administrator would enter nine-digit zip codes into a national database.<sup>119</sup> The database would identify the zip codes corresponding to high cost areas and could be designed to match high cost census blocks or wire centers with the appropriate nine-digit zip codes.<sup>120</sup> The database would also include the customer's last name and street address in those instances in which the nine-digit zip code is insufficient to identify a specific household.<sup>121</sup> The universal service support administrator could provide carriers with a listing of end users residing in high cost areas, which carriers could match against their billing database, or the carriers could submit claims for support by providing the administrator with an electronic listing of their customers by nine-digit zip code drawn from their billing records.<sup>122</sup> The fund administrator would use the customer's nine-digit zip code to determine whether the carrier is eligible to receive high cost support and would use the customer's name to identify more precisely the connection for which the carrier is requesting support.<sup>123</sup> According to MFS, carriers already use zip codes for billing purposes and have an incentive to retain customer zip codes because the US Postal Service offers postage discounts to bulk-billers that use zip codes.<sup>124</sup>

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<sup>116</sup> Teleport reply comments at 4.

<sup>117</sup> Teleport reply comments at 4.

<sup>118</sup> Letter from Mark Sievers, MFS, to William F. Caton dated February 27, 1997 (MFS February 27 *ex parte*) at 2.

<sup>119</sup> MFS February 27 *ex parte* at 2.

<sup>120</sup> MFS February 27 *ex parte* at 2.

<sup>121</sup> MFS notes that nine-digit zip codes identify small geographic areas. Specifically, nine-digit zip codes are organized as follows: (1) the first digit identifies one of nine national zip code areas; (2) the second digit identifies a state within the area; (3) the third digit identifies areas within a state; (4) the fourth and fifth digits identify the local delivery area within the areas; (5) the sixth and seventh digits identify a "sector," which may be several blocks, a group of streets, a high-building or a small geographic area; and (6) the last two digits identify a "segment" within the sector, which may be a single household, one floor in an office building, or one side of a street between two cross-streets. MFS February 27 *ex parte* at 3.

<sup>122</sup> MFS February 27 *ex parte* at 2.

<sup>123</sup> MFS February 27 *ex parte* at 2.

<sup>124</sup> MFS February 27 *ex parte* at 3.

MFS also argues that a system using zip codes would be automated and auditable.<sup>125</sup>

38. Conversely, several commenters oppose the Joint Board's recommendation not to provide universal service support beyond that provided for designated services carried on a single residential connection.<sup>126</sup> Some parties, including some rural LECs, assert that the cost of providing additional lines will increase if these lines are not supported.<sup>127</sup> In addition, Minnesota Coalition argues that eliminating support for additional residential lines would discourage LECs from installing sufficient facilities to accommodate second lines.<sup>128</sup> Similarly, GVNW argues that if, in the future, the definition of universal service is modified to include Internet access over separate facilities, eligible carriers will not have adequately invested in the facilities necessary to provide this service.<sup>129</sup> California SBA argues that, under the Joint Board's recommendation, there will be no economic incentive for new local service providers to build new facilities to compete with incumbent LECs because support levels will be "unrealistically low."<sup>130</sup> Western Alliance, for example, estimates that one of its members will have to triple the rate currently charged for a second residential connection if universal service support is not available for that connection.<sup>131</sup> Western Alliance contends that, if that same member's state commission permitted it to rebalance rates in order to make up for the loss of support for additional residential connections, the member would be required to increase all of its local service rates by 61 percent.<sup>132</sup> Such "revenue dislocation," Western Alliance contends, might amount to an unconstitutional taking.<sup>133</sup>

39. Evans contends that, unlike small rural LECs, large, geographically diversified RBOCs may be able to cross-subsidize rates for second lines within cost areas with revenues

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<sup>125</sup> MFS February 27 *ex parte* at 4.

<sup>126</sup> See, e.g., California SBA comments at 10; Minnesota Coalition comments at 20; PacTel comments at 19; Western Alliance comments at 15; Ex Parte Submission by the Office of Advocacy of the U.S. Small Business Administration on the Joint Board's Recommended Decision (filed April 4, 1997) at 12 (SBA April 4 *ex parte*).

<sup>127</sup> See, e.g., California SBA comments at 11; John Staurulakis comments at 21; Minnesota Coalition comments at 24; Western Alliance comments at 15.

<sup>128</sup> Minnesota Coalition comments at 24. See also California SBA comments at 12; RT Communications comments at 10-11; Tularosa Basin Tel. comments at 9.

<sup>129</sup> GVNW comments at 7.

<sup>130</sup> California SBA comments at 11.

<sup>131</sup> Western Alliance comments at 16.

<sup>132</sup> Western Alliance comments at 17.

<sup>133</sup> Western Alliance comments at 17.



generated in the RBOC's low cost service areas in order to keep rates low for second lines.<sup>134</sup> Staurulakis argues that incumbent LECs would be disadvantaged because customers will have an incentive to purchase second lines from competitive LECs, which could purchase bundled discounted services from the incumbent LEC and resell this service to customers as second lines.<sup>135</sup> TDS argues that most loop costs are incurred when installing the first line and that the incremental cost of additional connections is less than half the cost of installing the first connection.<sup>136</sup> Accordingly, TDS asserts, the Joint Board's recommendation to limit support to single connections will not reduce per-line support costs in proportion to the number of second or additional lines for which support would be eliminated under the Joint Board's proposal.<sup>137</sup> Rather, TDS contends, incumbent LECs will be encouraged to overprice additional lines to prevent the loss of support that should be directed almost entirely to the first line.<sup>138</sup> GVNW contends that, "at a minimum, costs associated with multiple lines should be incrementally identified while fully attributing joint and common costs associated with multiple lines to the first line."<sup>139</sup>

40. Roseville Tel. Co. argues that if multi-line business and residential lines are deemed ineligible for support, the proxy model should be adjusted to exclude the costs of providing services over these additional lines.<sup>140</sup> Roseville Tel. Co. contends that restricting support to single connections would require the establishment of separate revenue benchmarks for determining the amount of support an eligible carrier should receive under a proxy model because, it argues, multi-line businesses and residences with second lines would have significantly different toll usage levels than other business and residential customers.<sup>141</sup> According to Roseville Tel. Co., ILECs do not have access to customer toll billing records to estimate access revenues by customer class because IXC's have assumed the billing function for most large toll users, and the special traffic studies needed to determine these estimates would be costly and unreliable.<sup>142</sup>

41. Some commenters argue that a system that limits support to single residential

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<sup>134</sup> Evans Tel. Co. comments at 6.

<sup>135</sup> John Staurulakis comments at 20.

<sup>136</sup> TDS comments at 25.

<sup>137</sup> TDS comments at 25.

<sup>138</sup> TDS comments at 25.

<sup>139</sup> GVNW comments at 7.

<sup>140</sup> Roseville Tel. Co. comments at 8.

<sup>141</sup> Roseville Tel. Co. comments at 6.

<sup>142</sup> Roseville Tel. Co. comments at 7.

connections would be difficult to administer and bill."<sup>143</sup> SBC contends that ILECs will be unable to determine whether a particular dwelling has been divided or whether more than one household occupies a dwelling, and, thus, would have difficulty determining which residences have multiple connections.<sup>144</sup> John Staurulakis contends that it would be especially difficult to make such a determination when individuals residing in group homes have separate telephone lines.<sup>145</sup> Some parties question how the primary line will be determined if a customer obtains two lines, each from a different carrier.<sup>146</sup> According to PacTel, if the first line obtained in a multi-connection residence is always considered the single connection eligible for support, then the incumbent provider will have a competitive advantage.<sup>147</sup> Conversely, TCA argues that the supported line should be the one that is installed first.<sup>148</sup> SBC characterizes the Joint Board's suggestion that carriers use subscriber billing information as an "unworkable" method for determining the number of connections to a location, and argues that such an approach will become "even more unworkable" as competition develops.<sup>149</sup> According to GTE, service providers have no means, other than querying the customer, to determine whether a request for service involves a primary or secondary connection.<sup>150</sup>

42. Western Alliance opposes limiting support to single residential lines because, it contends, additional residential connections meet each of the criteria set forth in section 254(c)(1).<sup>151</sup> California SBA argues that the proposal to limit support to single residential connections violates the principles set forth in sections 254(b)(1)-(3) by failing to provide access to affordable telecommunications services in high cost areas.<sup>152</sup> GTE and TCA assert that the recommended limitation will have the practical effect of impeding access to and use of information services, in conflict with section 254(b)(2) because families will be discouraged from adding second lines to access on-line information services.<sup>153</sup> Evans Tel. Co. and NRPT

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<sup>143</sup> See, e.g., NRPT comments at 7; RTC comments at 20; TDS comments at 28 n.20; USTA comments at 30.

<sup>144</sup> SBC comments at 38. See also Evans Tel. Co. comments at 5; GTE comments at 77.

<sup>145</sup> John Staurulakis comments at 21. See also TCA comments at 5.

<sup>146</sup> GVNW comments at 6; NRPT comments at 7; PacTel comments at 19; Roseville Tel. Co. comments at 7; TCA comments at 5; USTA comments at 30.

<sup>147</sup> PacTel comments at 19.

<sup>148</sup> TCA comments at 5.

<sup>149</sup> SBC comments at 39. See also USTA comments at 30.

<sup>150</sup> GTE comments at 81.

<sup>151</sup> Western Alliance comments at 16. See also Lufkin-Conroe reply comments at 10-11.

<sup>152</sup> California SBA comments at 10-11.

<sup>153</sup> GTE comments at 78-79; TCA comments at 6.

argue that eliminating support for additional residential lines will violate section 254(b)(3) because rural consumers will pay far more for secondary connections than will urban subscribers.<sup>154</sup> Similarly, Lufkin-Conroe and RTC maintain that limiting universal service support to single lines will deny rural residents access to services and rates that are reasonably comparable to those of their urban counterparts.<sup>155</sup> TDS argues that the statute requires rural services and rates to be reasonably comparable to those in urban areas and, therefore, does not authorize regulators to decide that merely some portion of rural rates and services should be comparable to urban rates and services.<sup>156</sup> ITC contends that rural consumers, especially students, have a greater need than their urban counterparts for second lines that enable access to on-line information services at home because they generally live far from schools and libraries.<sup>157</sup> U S West asserts that the recommended approach would be neither specific nor predictable, contrary to the principle set forth in section 254(b)(5).<sup>158</sup>

43. SBC argues that, if the Commission elects not to support additional lines, as recommended by the Joint Board, the Commission must "preempt all pricing constraints on non-supported telephone exchange service unless upon implementation, the commission in a particular state has established an intrastate fund to support those federally unsupported services."<sup>159</sup> Similarly, USTA contends that if carriers cannot receive support for second lines, incumbent LECs should be given pricing flexibility to ensure that the costs of those lines can be fully recovered.<sup>160</sup> According to U S West, second and multiple lines should be deregulated in high cost areas if they are not supported.<sup>161</sup> TDS argues that if the long-established practice of averaging local rates for all lines were changed and additional lines were priced at cost, the result would be to increase the rates for all primary residential lines -- the lines that incur the most cost -- unless additional support is available for initial connections.<sup>162</sup> Ohio PUC proposes that, if funding is extended to second residential lines, then the Commission require as a pre-condition for universal service eligibility that carriers provide the second line at the same recurring and non-recurring rate to end users and offer promotions on a non-discriminatory basis

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<sup>154</sup> Evans Tel. Co. comments at 4; NRPT comments at 7. *See also* GTE comments at 79; ITC reply comments at 6; Lufkin-Conroe reply comments at 10.

<sup>155</sup> Lufkin-Conroe reply comments at 10; RTC reply comments at 25.

<sup>156</sup> TDS reply comments at 3.

<sup>157</sup> ITC reply comments at 6.

<sup>158</sup> US West comments at 27.

<sup>159</sup> SBC comments at 38. *See also* GTE comments at 81-82.

<sup>160</sup> USTA comments at 30. *See also* TDS comments at 29; Sprint reply comments at 6.

<sup>161</sup> US West comments at 26.

<sup>162</sup> TDS reply comments at 3, 10.

for both the primary and secondary lines.<sup>163</sup>

44. Limiting Support for Services Provided to the Primary Residence. Various parties support the Joint Board's recommendation that eligible carriers receive support for providing designated services to a residential subscriber's primary residence, but not to second or vacation homes.<sup>164</sup> California DCA favors this proposed limitation because of the reduced amount of support it anticipates that this approach will require.<sup>165</sup> Ameritech contends there are "no good public policy reasons" for funding a second line to a subscriber's summer residence.<sup>166</sup> APT asserts that supporting service to a second residence is inconsistent with section 254(c)(1)(A) because it is not "essential to education, public health, or public safety."<sup>167</sup> Taking the Joint Board's proposal a step further, California DCA questions how the Commission can justify supporting even one connection to the residence of consumers who can afford a second or vacation home.<sup>168</sup>

45. MFS also concurs with the recommendation to limit support to one connection to a subscriber's primary residence and proposes a plan wherein customers who are served by more than one carrier designate one specific carrier as their primary local exchange carrier for universal service purposes.<sup>169</sup> As discussed in paragraph 70, *supra*, MFS proposes a plan wherein the fund administrator would cross-reference the nine-digit zip codes of subscribers with census blocks or wire centers located in high cost areas.<sup>170</sup> MFS contends that using the nine-digit zip code for a customer's billing address, rather than for the service address, will minimize the likelihood that support would be provided for second or vacation homes because, MFS argues, customers who maintain more than one residence are likely to have their bills sent to their primary residence.<sup>171</sup>

46. Teleport urges the Commission to adopt a system that allows consumers to certify

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<sup>163</sup> Ohio PUC reply comments at 7.

<sup>164</sup> See, e.g., Ameritech comments at 6; APT comments at 5; PageMart comments at 6; WorldCom comments at 11; Motorola reply comments at 9; PCIA reply comments at 25.

<sup>165</sup> California DCA comments at 22-23.

<sup>166</sup> Ameritech comments at 6.

<sup>167</sup> APT reply comments at 5.

<sup>168</sup> California DCA comments at 22-23.

<sup>169</sup> MFS February 27 *ex parte* at 2.

<sup>170</sup> MFS February 27 *ex parte* at 2.

<sup>171</sup> MFS February 27 *ex parte* at 3.

that a supported service is being provided only to their primary residence.<sup>172</sup> Teleport further recommends that the fund administrator or some other entity conduct periodic audits to discourage fraud.<sup>173</sup>

47. Other commenters oppose limiting the number of residences for which a carrier may receive support.<sup>174</sup> Several parties contend that identifying a subscriber's "primary" residence is administratively unworkable.<sup>175</sup> RTC states that any mechanism implemented to determine the number of homes owned by each subscriber would be so complex that it would fail a cost/benefit analysis.<sup>176</sup> Texas PUC and U S West argue that the administrative difficulties associated with the Joint Board's recommendation outweigh any arguments in favor of limiting support.<sup>177</sup> Some parties question how ILECs would be able to determine whether their customers own an additional residence in another carrier's service area, or own residences in more than one spouse's name.<sup>178</sup> Western Alliance argues that the administrative costs involved in determining whether a subscriber's residence is "primary" will reduce the carrier's net universal service support amount.<sup>179</sup> RTC, arguing that resort areas are often occupied by permanent residents, contends that MFS' proposal to use nine-digit zip codes would deny support to families that need it.<sup>180</sup> RTC contends that the Recommended Decision "illegally introduces means testing into the high cost support mechanism."<sup>181</sup> Some parties raise privacy concerns because, they argue, an investigation into consumers' property ownership would be required to limit support to the primary residence.<sup>182</sup> Similarly, Minnesota Coalition argues that rural LECs

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<sup>172</sup> Teleport reply comments at 4.

<sup>173</sup> Teleport reply comments at 4.

<sup>174</sup> See, e.g., GTE comments at 79-81; PacTel comments at 19; RTC comments at 20; SBC comments at 37.

<sup>175</sup> See, e.g., GVNW comments at 7; Minnesota Coalition comments at 24; PacTel comments at 19; SBC comments at 37; Western Alliance comments at 18; Virginia's Rural Tel. Co. comments at 2; ITC reply comments at 8; Lufkin-Conroe reply comments at 11.

<sup>176</sup> RTC comments at 21.

<sup>177</sup> Texas PUC comments at 3; US West comments at 25.

<sup>178</sup> GVNW comments at 6; RTC comments at 21-22; Virginia's Rural Tel. Co. comments at 2; Western Alliance comments at 18-19.

<sup>179</sup> Western Alliance comments at 20.

<sup>180</sup> RTC reply comments at 28.

<sup>181</sup> RTC comments at 20-21.

<sup>182</sup> Evans Tel. Co. comments at 5; GTE comments at 81; John Staurulakis comments at 21; RTC comments at 20-21; Lufkin-Conroe reply comments at 11.

are not in a position to monitor the living habits of their customers.<sup>183</sup> Western Alliance and U S West urge the Commission, if it adopts the Joint Board's recommendation, to allow carriers to rely on a customer's self certification that a specified line is serving a primary or second residence.<sup>184</sup> GTE contends that consumers, particularly those who understand the system, will be motivated to declare a vacation home in a high cost area as the consumer's primary residence.<sup>185</sup>

48. GTE opposes the Joint Board's recommendation that ILECs use billing information to identify a consumer's primary residence. GTE argues that billing information does not answer "dozens of other questions" such as whether more than one household shares a dwelling and whether another carrier is already providing service to a customer's "primary" residence in a different state.<sup>186</sup> GTE further states that the Commission must address certain "real-life, practical" considerations such as whether individuals may self-certify to their status and whether carriers must retain records for audit purposes.<sup>187</sup>

49. Minnesota Coalition argues that eliminating support for second homes will impose a disproportionate burden on rural ILECs because these ILECs serve many vacation and second homes.<sup>188</sup> Minnesota Coalition asserts that the primary residence limitation would violate the statutory requirement that support be "predictable" because support for rural LECs would fluctuate when subscribers "change their residential status or move away from a residence previously occupied."<sup>189</sup> The requirement that support be "sufficient" would also be violated, Minnesota Coalition contends, because eliminating support for residences that were previously eligible for support would reduce a carrier's level of support without a corresponding reduction in expenses.<sup>190</sup> Similarly, Western Alliance and Evans Tel. Co. argue that an ILEC would lose compensation for costs incurred when it installs a new line to provide service to a primary residence if the residence is subsequently sold to a subscriber who uses it as a second residence.<sup>191</sup> Silver Star Tel. Co. notes that ILECs are required to serve second and vacation homes as part of their COLR obligations and thus, it argues, they should be eligible to receive

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<sup>183</sup> Minnesota Coalition comments at 24. *See also* Lufkin-Conroe reply comments at 11.

<sup>184</sup> US West comments at 27; Western Alliance comments at 20.

<sup>185</sup> GTE comments at 78, 82.

<sup>186</sup> GTE comments at 80, 81. *See also* Lufkin-Conroe reply comments at 11.

<sup>187</sup> GTE comments at 80-81.

<sup>188</sup> Minnesota Coalition comments at 22.

<sup>189</sup> Minnesota Coalition comments at 23.

<sup>190</sup> Minnesota Coalition comments at 23. *See also* Western Alliance comments at 15.

<sup>191</sup> Evans Tel. Co. comments at 5; Western Alliance comments at 18.

support for serving additional residences.<sup>192</sup> U S West contends that the COLR obligation should be changed if the Joint Board's recommendation is adopted.<sup>193</sup> SBC argues that limiting support to primary residences would be confiscatory because it would deny incumbent LECs a reasonable opportunity to recover the costs of providing service.<sup>194</sup> USTA argues that if carriers cannot receive support for serving second residences, incumbent LECs must be given pricing flexibility to ensure that the costs of these lines are fully recovered.<sup>195</sup>

50. Evans Tel. Co. contends that the Joint Board's proposal violates section 254(b)(3) because consumers who own second residences in high cost areas will be subject to higher rates for second lines than those who own second residences in low cost areas.<sup>196</sup> Evans Tel. Co. asserts such a result constitutes a violation of the principle of "reasonably comparable" services and rates for urban and rural consumers.<sup>197</sup> Silver Star Tel. Co. argues that subscribers require the same access to health, emergency, and community services when they inhabit a second residence as they do when they are at their primary residence.<sup>198</sup> Lufkin-Conroe contends that, because second or vacation homes may be occupied for only part of the year, their owners may elect to forego telephone service if rates increase significantly.<sup>199</sup> The absence of telephone service, Lufkin-Conroe argues, could result in delayed access to emergency services with the potential resulting loss of life or property.<sup>200</sup>

51. Supporting Designated Services Carried to Single-Connection Businesses. As a preliminary matter, Georgia PSC urges the Commission to clarify the distinction between the terms "single-connection" and "single-line."<sup>201</sup> According to Georgia PSC, the category of single-connection businesses is more limited than that of single-line businesses because a business may have several "single-line" connections.<sup>202</sup> In general, several commenters agree

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<sup>192</sup> Silver Star Tel. Co. comments at 4.

<sup>193</sup> US West comments at 25.

<sup>194</sup> SBC comments at 38.

<sup>195</sup> USTA comments at 30.

<sup>196</sup> Evans Tel. Co. comments at 4-5.

<sup>197</sup> Evans Tel. Co. comments at 4-5.

<sup>198</sup> Silver Star Tel. Co. comments at 4.

<sup>199</sup> Lufkin-Conroe reply comments at 11.

<sup>200</sup> Lufkin-Conroe reply comments at 11.

<sup>201</sup> Georgia PSC reply comments at 9.

<sup>202</sup> Georgia PSC reply comments at 9-10.

that support should be provided for designated services provided to single-connection businesses.<sup>203</sup>

52. Several commenters, however, advocating a more restrictive approach, take issue with the Joint Board's recommendation that universal service support be available even for single-connection businesses.<sup>204</sup> Ameritech argues that supporting business services constitutes a substantial policy shift and would "inevitably and significantly" increase the size of the support mechanisms.<sup>205</sup> According to Ameritech and LCI, telephone service should be considered a cost of starting and operating a business that should not be supported by federal universal service mechanisms.<sup>206</sup> Ameritech argues that small businesses already get a "quasi-subsidy" in the form of a tax deduction, which is not available to residential consumers, and receive assistance from mechanisms such as Small Business Administration loans and other state and federal programs.<sup>207</sup>

53. Ameritech also argues that there is nothing in the legislative history of the 1996 Act that indicates that Congress intended to use section 254 to subsidize business development.<sup>208</sup> NTIA and BANX contend that supporting business connections would be inconsistent with section 254(c)(1)(B) that states that, in defining universal service, the Commission should consider the extent to which telecommunications services "have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers."<sup>209</sup> APT contends that the Joint Board failed to demonstrate that services to single-connection businesses are "essential" so as to warrant their support pursuant to section 254(c)(1).<sup>210</sup> LCI argues that when Congress believed that special circumstances required support to be extended to non-residential subscribers -- such as schools, libraries and health care

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<sup>203</sup> Cox Communications comments at 4; WorldCom comments at 11; NTIA reply comments at 6.

<sup>204</sup> AirTouch comments at 21; Ameritech comments at 7; Kentucky PSC comments at 4; LCI comments at 5; Maryland PSC comments at 9; Sprint comments at 14; Teleport comments at 3-4; ACTA reply comments at 3; APT reply comments at 5; Teleport reply comments at 4.

<sup>205</sup> Ameritech comments at 7. *See also* Maryland PSC comments at 9; Kentucky PSC comments at 4; BANX reply comments at 17.

<sup>206</sup> Ameritech comments at 7; LCI comments at 6. *See also* BANX reply comments at 17; GCI reply comments at 13.

<sup>207</sup> Ameritech comments at 7. *See also* AirTouch comments at 22; PageMart reply comments at 4; Teleport reply comments at 4-5.

<sup>208</sup> Ameritech comments at 7. *See also* Maryland PSC comments at 9; Teleport comments at 3-4.

<sup>209</sup> BANX reply comments at 17; NTIA reply comments at 6 n.13.

<sup>210</sup> APT reply comments at 6. *See also* GCI reply comments at 13.



providers -- it expressly provided for such support.<sup>211</sup>

54. According to Teleport, there is no evidence to suggest that businesses are unable to pay cost-based rates for their services.<sup>212</sup> Similarly, Sprint contends that there is no information in the record to confirm the hypothesis that small businesses will forego local telephone service in high cost areas unless such service is supported.<sup>213</sup> ACTA contends that a general rule providing for support to single-line businesses is overly broad. Thus, ACTA proposes an alternative method pursuant to which the demonstrated need of a business for support determines whether a business single-connection line will be supported.<sup>214</sup> Maryland PSC asserts that any business customer could benefit from universal service by obtaining single lines from multiple carriers or attaching a PBX to a single business line.<sup>215</sup> Maryland PSC favors allowing the competitive marketplace to control costs for businesses.<sup>216</sup> California PUC argues that in California, unlike residential measured rate service, the measured business rate does not include any calling allowance, so all local calls made on business lines result in revenue for the LEC.<sup>217</sup> Accordingly, California PUC opposes the Joint Board's recommendation to support businesses with single connections.

55. In contrast, several parties urge the Commission to support services provided to businesses with multiple connections and oppose the Joint Board's recommendation to limit support to services provided to businesses with single connections.<sup>218</sup> Many commenters argue that such a limitation would harm rural economies.<sup>219</sup> For example, Lufkin-Conroe argues that the cost of telephone service is a factor that directly influences whether a telemarketing firm or other communications-intensive business will locate or remain in a rural community.<sup>220</sup> In

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<sup>211</sup> LCI comments at 6.

<sup>212</sup> Teleport comments at 3.

<sup>213</sup> Sprint comments at 14. *See also* AirTouch reply comments at 32; BANX reply comments at 17.

<sup>214</sup> ACTA reply comments at 3.

<sup>215</sup> Maryland PSC comments at 9.

<sup>216</sup> Maryland PSC comments at 9-10. *See also* Teleport comments at 4.

<sup>217</sup> California PUC reply comments at 3.

<sup>218</sup> *See, e.g.*, GVNW comments at 7; Iowa UB comments at 5; Minnesota Coalition comments at 25; Roseville Tel. Co. comments at 6; RTC comments at 18; SBA comments at 4-8; Western Alliance comments at 22; California SBA reply comments at 2.

<sup>219</sup> *See, e.g.*, California SBA comments at 13; Evans Tel. Co. comments at 7; GVNW comments at 7; Iowa UB comments at 5; Roseville Tel. Co. comments at 9; RTC comments at 19; SBA comments at 18; Western Alliance comments at 20-22.

<sup>220</sup> Lufkin-Conroe reply comments at 13.

addition, SBA reports that, in response to a recent poll, 3.6 percent of rural businesses indicated that they would relocate or discontinue their operations if their telephone service rates increased by \$10.00 per month and nearly 20 percent indicated that they would relocate or discontinue their operations if telephone service rates increased by \$25.00 per month.<sup>221</sup> SBA suggests that increases of these proportions are possible as a result of the Joint Board's recommendation to deny support for services provided to businesses with multiple connection. Some commenters insist that absent federal support, carriers will be required to increase rates for businesses with multiple connections.<sup>222</sup> In addition, Minnesota Coalition argues that ILEC investments that were made when a business had only a single line would lose support when a second line is added.<sup>223</sup> Roseville Tel. Co. contends that a system that limits support to businesses with single connections would be administratively difficult to administer, requiring complex and costly studies of billing records.<sup>224</sup> Minnesota Coalition asserts that, under the Joint Board's proposal, business customers with multiple connections would be encouraged to mischaracterize themselves as having only single-connections.<sup>225</sup>

56. SBA argues that without support, rates charged to businesses with multiple connections will not be "affordable" for rural businesses, an outcome inconsistent with section 254(b)(1).<sup>226</sup> In addition, SBA contends that the Joint Board's proposal to limit support to businesses with single connections is inconsistent with promotion of access to advanced telecommunications services, a principle found in section 254(b)(2), because the proposal creates a disincentive for rural businesses with single connections to add connections to accommodate fax lines or modems.<sup>227</sup> According to Evans Tel. Co., it is not clear whether Congress intended business customers to be considered "consumers" for purposes of section 254(b)(3), but that the provisions of sections 254(b)(1) and (2) clearly apply to businesses.<sup>228</sup> RTC and SBA contend that businesses with multiple connections should be considered "consumers" for which services and rates should be "reasonably comparable" in urban and rural areas, a principle found in

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<sup>221</sup> SBA comments at 17-18 (*citing* OPATSCO, *Keeping Rural America Connected* at 6-14). *See also* California SBA reply comments at 2; RTC reply comments at 27.

<sup>222</sup> California SBA comments at 13; Minnesota Coalition comments at 25; SBA comments at 14.

<sup>223</sup> Minnesota Coalition comments at 25.

<sup>224</sup> Roseville Tel. Co. comments at 6-7.

<sup>225</sup> Minnesota Coalition comments at 25.

<sup>226</sup> SBA comments at 15-16.

<sup>227</sup> SBA comments at 19. *But see* Georgia PSC reply comments at 9 (arguing that SBA and other parties that oppose limiting support to businesses with single connections do not consider economic factors such as lower land costs, rents, and wages that benefit rural businesses).

<sup>228</sup> Evans Tel. Co. comments at 6.

section 254(b)(3).<sup>229</sup> SBA contends that the Recommended Decision imposes a distinction among classes of "consumers" where none is warranted and none was intended by Congress.<sup>230</sup> SBA contends that the legislative history of section 254 indicates that some members of Congress intended universal service support to be available for small businesses.<sup>231</sup> RTC argues that all business lines in high cost areas should be supported because Congress recognized the differences between business and residential lines when it chose not to limit toll rate averaging to residential service.<sup>232</sup>

57. Western Alliance argues that most rural businesses with multiple lines are small businesses that use additional lines to record messages, send facsimiles or use on-line services.<sup>233</sup> TDS states that "few businesses are able to get by with only a single connection in the current information-laden business environment."<sup>234</sup> SBA, noting that businesses with multiple connections include city halls, police stations, churches, school boards, and other public bodies, asserts that rural businesses with multiple lines share the same need for access to health, safety, and employment services as residential subscribers do.<sup>235</sup> SBA proposes that carriers receive universal service support for all connections provided to these institutional users.<sup>236</sup> SBA also contends that significant telephone rate increases are likely to be as cost-prohibitive for businesses with many lines as they would be for businesses with only one.<sup>237</sup> Evans Tel. Co. suggests that the Commission expand upon the Joint Board's recommendation by supporting services provided to businesses with no more than five connections.<sup>238</sup>

58. A few parties propose alternatives to the Joint Board's recommendation regarding support for businesses with single connections. California SBA recommends that businesses located in high cost areas that employ fewer than 100 employees and earn less than \$10 million

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<sup>229</sup> RTC comments at 18; SBA comments at 4-6, 13. *See also* CNMI comments at 27; Harris comments at 7.

<sup>230</sup> SBA comments at 4.

<sup>231</sup> SBA comments at 5 (*citing* statements in the Congressional Record by Senators Pressler, Burns, Conrad and Snowe at 142 Cong. Rec. S687 (1996), 142 Cong. Rec. S700 (1996), 142 Cong. Rec. S703 (1996), and 142 Cong. Rec. S708 (1996), respectively).

<sup>232</sup> RTC comments at 19 (*citing Joint Explanatory Statement* at 129 and 132). *See also* TDS comments at 27-28.

<sup>233</sup> Western Alliance comments at 22. *See also* Evans Tel. Co. comments at 6.

<sup>234</sup> TDS comments at 29.

<sup>235</sup> SBA comments at 7-8.

<sup>236</sup> SBA April 4 *ex parte* at 13.

<sup>237</sup> SBA comments at 8.

<sup>238</sup> Evans Tel. Co. comments at 7.

in gross annual revenues "be eligible for universal service support for all business lines."<sup>239</sup> California SBA recommends that businesses should be required to certify under penalty of perjury that they meet these criteria "before they are eligible for support."<sup>240</sup> In addition, the state Joint Board members propose that the Commission adopt the three-year transition period recommended by the Joint Board, during which high cost support for rural telephone companies would extend to all of a carrier's working lines. In addition, SBA proposes that carriers serving businesses with \$5.0 million or less in annual gross receipts receive universal service support for an unlimited number of connections.<sup>241</sup> In addition, SBA recommends that carriers serving all other businesses receive support for up to five connections for those businesses to ensure that business connections used for fax machines, computer modems and credit card and check approval verification are supported.<sup>242</sup> SBA also suggests that, if support to multiple-connection businesses is reduced, the dollar amount of support a carrier would lose per line should be capped and additional universal service support should be available to make up the difference between the cap amount and the previous amount of support the carrier received.<sup>243</sup> The state Joint Board members further propose that the ongoing cooperative state-Commission review of the forward-looking cost methodologies also include a review of whether support should be limited to residential and single connection businesses for rural carriers.<sup>244</sup>

59. Level of Support for Business Connections. CNMI, Interior, and TCA argue that the amount of support provided should be the same whether a connection serves a business or residential customer.<sup>245</sup> SBA and CNMI argue that the Joint Board's rationale for supporting businesses with single connections, i.e., that they have been treated similarly in the past, warrants making support for businesses with single connections match the support for primary connections to residences.<sup>246</sup> In addition, CNMI argues that providing a reduced amount of universal service support for services provided to businesses with only one line would permit business rates to remain disproportionately high, substantially increase the costs of small, start-

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<sup>239</sup> Letter from Betty Jo Toccoli, California SBA, to Hon. Sharon L. Nelson, Washington Utilities and Transportation Commission dated March 10, 1997 (California SBA March 10 *ex parte*) at 2.

<sup>240</sup> California SBA March 10 *ex parte* at 2.

<sup>241</sup> SBA April 4 *ex parte* at 11.

<sup>242</sup> SBA April 4 *ex parte* at 11.

<sup>243</sup> Letter from Jere W. Glover, SBA, to Chm. Reed E. Hundt dated April 27, 1997.

<sup>244</sup> State Member's Report on the Use of Cost Proxy Models, March 26, 1997 at 3.

<sup>245</sup> CNMI comments at 27; TCA comments at 5; Interior reply comments at 2.

<sup>246</sup> CNMI comments at 28 (*citing* Recommended Decision, 12 FCC Rcd at 133-134); SBA comments at 10-11 (*citing* Recommended Decision, 12 FCC Rcd at 133-134).

up businesses and, thereby, discourage entrepreneurship.<sup>247</sup> SBA opposes the Joint Board's suggestion that, as competition develops, it may be unnecessary to provide any support for businesses with a single connection in the future, stating that small businesses are vulnerable to rate increases and have a limited ability to pass on increased costs to their customers.<sup>248</sup>

60. United Utilities disagrees with the Joint Board's conclusion that services provided to businesses with a single connection should be supported at a reduced rate because business rates are higher than residential rates.<sup>249</sup> Business rates are higher, United Utilities argues, because there are implicit subsidies built into these rates that help keep residential rates low.<sup>250</sup> According to United Utilities, these implicit subsidies will be eliminated when "competition and the unbundling of rates make support flows explicit" and, thus, the Joint Board should not have recommended reduced support for business connections based on the fact that business rates are currently higher than residential rates.<sup>251</sup> Conversely, Texas PUC agrees with the Joint Board's recommendation that businesses with a single line should be supported at a reduced rate.<sup>252</sup>

## **E. Quality of Service**

### **1. Comments**

61. Federal Role. CWA contends that the Commission should establish federal performance-based service quality standards on which all telecommunications providers must report and for which they are accountable.<sup>253</sup> According to CWA, the Joint Board's recommendation that "states may adopt and enforce service quality standards" does not ensure the "mandate" of section 254(b)(1) that "quality services should be available at just, reasonable, and affordable rates."<sup>254</sup> Relying on data compiled by NARUC, CWA maintains that many states do not have quality standards and those that do have standards do not necessarily have

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<sup>247</sup> CNMI comments at 28.

<sup>248</sup> SBA comments at 11-12 (*citing* Recommended Decision, 12 FCC Rcd at 134). *See also* California SBA reply comments at 3.

<sup>249</sup> United Utilities comments at 5 (*citing* Recommended Decision, 12 FCC Rcd at 134).

<sup>250</sup> United Utilities comments at 6.

<sup>251</sup> United Utilities comments at 6-7.

<sup>252</sup> Texas PUC comments at 3.

<sup>253</sup> CWA reply comments at 6.

<sup>254</sup> CWA comments at 5.

comprehensive standards.<sup>255</sup> CWA suggests that the Commission establish a special task force or delegate the responsibility of developing comprehensive service quality standards to the Network Reliability Council.<sup>256</sup> Moreover, CWA urges the Commission to require all carriers that receive universal service support to meet federal service quality standards in each of the four calendar quarters preceding the receipt of such support. CWA would deny support to carriers that fail to meet this threshold and require those carriers to pay a penalty to the universal service administrator that would be used to support universal service.<sup>257</sup>

62. State Roles. A few parties suggest that the Commission permit states to implement carrier performance standards.<sup>258</sup> For example, California DCA argues that while the nation as a whole may need federal mandates to foster competition and achieve universal service goals, the states are well-equipped to implement the details of those policies.<sup>259</sup> Ohio PUC agrees with the Joint Board's recommendation that states submit service quality data to the Commission, but urges the Commission to determine the type of data it would expect state commissions to provide.<sup>260</sup> CWA argues that, if it relies on state commissions to monitor service quality, the Commission should require states to impose on competitive LECs the same quality standards they impose on incumbent LECs.<sup>261</sup>

63. Quality of Service Reporting Requirements. North Dakota PSC contends that information pertaining to service quality should be made public in order to enable comparisons between the performance of different telecommunications carriers.<sup>262</sup> According to North Dakota PSC, providing consumers with easy access to publicly available data on the performance of various carriers could spur carriers to compete for customers on the basis of service quality.<sup>263</sup> Further, North Dakota PSC contends that the Commission should collect

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<sup>255</sup> CWA reply comments at 5 (*citing* NARUC's 1992 *Telephone Service Quality Standards*, which indicates that 25 states had no service standards on installation, 16 states had no service standards on call completion and business office, repair bureau, directory assistance, and toll operator answer time, 27 states had no technical standards on transmission, and 17 states had no standards on trouble reports and clearing time).

<sup>256</sup> CWA reply comments at 6.

<sup>257</sup> CWA reply comments at 7.

<sup>258</sup> *See, e.g.*, California DCA comments at 19; Maryland PSC comments at 8; National Black Coalition comments at att. 1; Ohio PUC comments at 6; WorldCom comments at 11.

<sup>259</sup> California DCA comments at 19.

<sup>260</sup> Ohio PUC comments at 6.

<sup>261</sup> CWA reply comments at 7-8 (*citing* the comments of SBA filed in response to Public Notice of November 18, 1996 at 21).

<sup>262</sup> North Dakota PSC comments at 1. *See also* CWA reply comments at 8.

<sup>263</sup> North Dakota PSC comments at 1.

quality of service data in addition to that already submitted through mechanisms such as ARMIS because only one LEC in North Dakota is required to file ARMIS data and state law exempts telephone companies serving fewer than 8000 lines from quality service oversight by the North Dakota PSC.<sup>264</sup> Moreover, North Dakota PSC maintains that there is no industry organization in North Dakota that collects and publishes service quality data.<sup>265</sup>

## **F. Reviewing the Definition of Universal Service**

### **1. Comments**

64. In General. GVNW argues that, if anticipated revenues are not "sufficient," carriers will not invest in advanced services because they will not expect to recover costs, including a reasonable profit.<sup>266</sup> Accordingly, GVNW argues that if, in the future, the definition of universal service is modified to include additional services, those carriers that have not invested in advanced services will no longer qualify to receive support because they will be unable to provide all of the newly designated services.<sup>267</sup>

65. Periodic Reassessment. Some commenters suggest that the definition of universal service should be revised periodically.<sup>268</sup> According to CNMI, periodic revisions to the definition are appropriate because of the pace and scope of change in the telecommunications market and the provision in section 254(c) that describes the definition of universal service as "an evolving level of telecommunications services."<sup>269</sup> A few parties concur with the Joint Board's recommendation to convene a Joint Board no later than January 1, 2001 to revisit the definition of universal service.<sup>270</sup>

66. In contrast, People For contends that "periodically" means more than one review after four years.<sup>271</sup> Instead, People For urges a biennial review which, it argues, is necessary to

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<sup>264</sup> North Dakota PSC comments at 2 (arguing that US West is the only LEC that is required to submit ARMIS data).

<sup>265</sup> North Dakota PSC comments at 2.

<sup>266</sup> GVNW comments at 5.

<sup>267</sup> GVNW comments at 5.

<sup>268</sup> CNMI comments at 37; GVNW comments at 5; NetAction comments at 4; Ohio PUC comments at 6.

<sup>269</sup> CNMI comments at 37.

<sup>270</sup> North Dakota PSC comments at 2; Texas PUC comments at 4; WorldCom comments at 11.

<sup>271</sup> People For comments at 7.

keep universal service policies current.<sup>272</sup> Using the growth of Internet deployment in the last four years as an example, People For asserts that the definition of universal service should be reviewed every two years.<sup>273</sup> Illinois CC asserts that the Commission should revisit the definition of universal service pursuant to section 254(c)(1) after the Joint Board has evaluated an alternate definition of services to be supported and the costs associated with supporting those services.<sup>274</sup>

## **V. AFFORDABILITY**

### **A. Overview**

67. The following is a summary of the comments related to the issue of affordability.

### **B. Affordability**

#### **1. Comments**

68. In General. Several parties express concern regarding the relationship between expanding the level of universal service funding, and the affordability of rates for telecommunications consumers who, they argue, ultimately must pay for an expanded funding obligation.<sup>275</sup> These parties contend that if universal service support is not carefully targeted and overall funding levels are not appropriately circumscribed, then telephone service will become unaffordable for increasing numbers of subscribers.<sup>276</sup> Citizens Utilities, while conditionally accepting the Joint Board's general conclusion that current rates are affordable, argues that the Commission must consider whether rates will remain affordable in the competitive environment, as well as the potential impact of rate increases on telecommunications services subscribers.<sup>277</sup> Similarly, Puerto Rico Tel. Co. asserts that in order to fulfill the statutory goal of "just, reasonable and affordable" rates, universal service mechanisms must mitigate the effect of any rate increases to prevent the loss of subscribers.<sup>278</sup> According to Puerto Rico Tel. Co., Congress

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<sup>272</sup> People For comments at 7.

<sup>273</sup> People For comments at 7-8.

<sup>274</sup> Illinois CC comments at 10.

<sup>275</sup> See, e.g., PCIA comments at 7; Sprint comments at 2-3; Motorola reply comments at 9-10.

<sup>276</sup> See, e.g., AirTouch comments at 3-4 (citing Commissioner Chong's concern that policy makers "need to carefully consider the impact on all consumers before [they] expand the scope of funding obligations." Recommended Decision, Separate Statement of Commissioner Chong at 6); PCIA comments at 7; Sprint comments at 2-3; Motorola reply comments at 9-10.

<sup>277</sup> Citizens Utilities comments at 20.

<sup>278</sup> Puerto Rico Tel. Co. comments at 10-11.



specifically directed the Joint Board and Commission to "ensure that universal service is achieved" because, it argues, the combined effect of new regulations in the areas of universal service, interconnection pricing, and access charge reform "is likely to place unavoidable upward pressure on consumer rates."<sup>279</sup>

69. Factors Affecting Affordability. Several parties support the Joint Board's general finding that the definition of affordability must take into account both rate levels and non-rate factors.<sup>280</sup> With respect to specific factors affecting affordability, numerous commenters support the Joint Board's inclusion of local calling area size or local calling scope among the factors that must be considered in determining affordability.<sup>281</sup> Minnesota Coalition argues that the prices rural consumers pay for extensions of local calling scope, such as Extended Area Service, should be factored into a determination of affordability.<sup>282</sup> A few parties argue that, in determining rate affordability, the Commission should consider whether consumers have the ability to contact their "community of interest," i.e., hospitals, schools and other essential services, by placing local calls.<sup>283</sup>

70. In addition, several parties favor considering income levels when assessing rate affordability.<sup>284</sup> People For contends that the Commission should establish a formula based on a fixed or progressively increasing percentage of disposable income that would guide the states in determining whether rates are affordable.<sup>285</sup> According to People For, this approach would be equitable because, it argues, consumers with the lowest income levels are least able to afford telecommunications services.<sup>286</sup> Minnesota Coalition supports the Joint Board's decision not to recommend the adoption of a national median level of income for purposes of assessing affordability because, it argues, such a standard would tend to "overestimate the price at which service is affordable when applied to a service area having an income level that is significantly

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<sup>279</sup> Puerto Rico Tel. Co. comments at 8.

<sup>280</sup> See, e.g., Bell Atlantic comments at 16; CNMI comments at 35; Governor of Guam comments at 10 (factors other than "the absolute level of rates" affect affordability); People For comments at 8.

<sup>281</sup> See, e.g., Bell Atlantic comments at 16; CNMI comments at 35; Governor of Guam comments at 9; Minnesota Coalition comments at 10; People For comments at 8; Vermont PSB comments at 13.

<sup>282</sup> Minnesota Coalition comments at 11.

<sup>283</sup> People For comments at 8-9; Vermont comments at 14. See also United Utilities comments at 4.

<sup>284</sup> Bell Atlantic comments at 16; CNMI comments at 35; Governor of Guam comments at 9; Minnesota Coalition comments at 10; People For comments at 9-10.

<sup>285</sup> People For comments at 9.

<sup>286</sup> People For comments at 9.

below the national median."<sup>287</sup> Consistent with the Recommended Decision, some parties also favor consideration of the cost of living,<sup>288</sup> population density,<sup>289</sup> and other socioeconomic factors<sup>290</sup> among the factors that affect affordability.

71. Affordability of Current Rates. Bell Atlantic contends that the existing nationwide subscribership level is high and stable, and, thus, indicates that current rates are affordable.<sup>291</sup> In contrast, Governor of Guam argues that the Commission should conclude that where existing rates are not affordable or reasonably comparable to urban rates, such as in Guam, rates in such areas can be supported by universal service support mechanisms.<sup>292</sup>

72. Link Between Subscribership and Affordability. Various parties agree with the Joint Board's finding that a correlation exists between affordability and subscribership levels.<sup>293</sup> People For, however, urges against basing any definition of affordability solely on subscribership levels.<sup>294</sup> According to People For, a high subscribership level does not reveal whether the average family is spending a disproportionate amount of its disposable income on telecommunications services.<sup>295</sup> People For urges the Commission to consider income levels in conjunction with subscribership levels in determining affordability.<sup>296</sup>

73. Puerto Rico Tel. Co., stating that its subscribership has not yet reached an acceptable level, argues that the Joint Board's proposal that the Commission work with states that have declining subscribership levels ignores the fact that certain regions currently have a low subscribership level.<sup>297</sup> Puerto Rico Tel. Co. suggests that "if the subscribership level in an eligible carrier's service area is more than five percentage points below the national average,"

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<sup>287</sup> Minnesota Coalition comments at 12.

<sup>288</sup> Bell Atlantic comments at 16; CNMI comments at 35; Minnesota Coalition comments at 10.

<sup>289</sup> Bell Atlantic comments at 16; Governor of Guam comments at 9.

<sup>290</sup> CNMI comments at 35.

<sup>291</sup> Bell Atlantic comments at 2.

<sup>292</sup> Governor of Guam comments at 10.

<sup>293</sup> CNMI comments at 35; Washington UTC comments at 11; Interior reply comments at 2; Puerto Rico Tel. Co. reply comments at 13.

<sup>294</sup> People For comments at 9.

<sup>295</sup> People For comments at 9.

<sup>296</sup> People For comments at 9.

<sup>297</sup> Puerto Rico Tel. Co. comments at 17-18.

then the local rate should be deemed presumptively not affordable.<sup>298</sup>

74. State and Federal Roles in Ensuring Affordability. Bell Atlantic supports the recommendation that states exercise primary responsibility for determining the affordability of rates within their respective jurisdictions.<sup>299</sup> Minnesota Coalition favors the Joint Board's decision not to recommend the establishment of a nationwide affordable rate and argues that such a general rate would fail to consider the impact of local characteristics on affordability.<sup>300</sup> Some parties concur with the Joint Board's conclusion that state commissions have the ability, knowledge, and expertise to measure and evaluate the factors affecting affordability.<sup>301</sup> Washington UTC also agrees with the Joint Board's recommendation that the Commission work together with states to determine the cause of a decrease in a state's subscribership level and the implications for affordability in that state.<sup>302</sup> People For argues that declining income levels, and not just declining subscribership levels, should trigger Commission review of affordability in a given state.<sup>303</sup> Bell Atlantic argues that only if subscribership rates drop by a "statistically significant amount over a period of time," and the state asks for federal help, should the Commission offer to work with the state to determine and remedy the problem.<sup>304</sup>

75. Measuring Level of Support Based on Affordability or Subscribership Levels. Puerto Rico Tel. Co. maintains that the Joint Board has failed to propose how a determination at the state level that rates are not affordable will be addressed by federal universal service mechanisms.<sup>305</sup> Puerto Rico Tel. Co. argues that merely "identifying" whether rates are affordable does nothing to ensure that rates are affordable.<sup>306</sup> Puerto Rico Tel. Co. suggests that the Commission use affordability, as measured by subscribership levels, to determine the level of support payments available to carriers serving areas where rates are not affordable.<sup>307</sup> Interior likewise urges the Commission to provide universal service support for rates that are not

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<sup>298</sup> Puerto Rico Tel. Co. comments at 27. *See also* Puerto Rico Tel. Co. reply comments at 13.

<sup>299</sup> Bell Atlantic comments at 16. *See also* South Carolina comments at 14.

<sup>300</sup> Minnesota Coalition comments at 12.

<sup>301</sup> Bell Atlantic comments at 16; South Carolina comments at 14; Washington UTC comments at 11.

<sup>302</sup> Washington UTC comments at 11. *See also* Bell Atlantic comments at 16.

<sup>303</sup> People For comments at 10.

<sup>304</sup> Bell Atlantic comments at 16.

<sup>305</sup> Puerto Rico Tel. Co. comments at 17.

<sup>306</sup> Puerto Rico Tel. Co. comments at 17.

<sup>307</sup> Puerto Rico Tel. Co. comments at 18.

affordable or reasonably comparable.<sup>308</sup> MFS, arguing generally in favor of retaining current levels of high cost support, states that increases in total high cost support should occur only when there is a decline in subscribership or when there is a substantial change in a factor affecting affordability.<sup>309</sup>

## **VI. Carriers Eligible for Universal Service Support**

### **A. Overview**

76. The following is a summary of the comments relating to the issues of: Eligible Telecommunications Carriers, Service Areas, and Unserved Areas.

### **B. Eligible Telecommunications Carriers**

#### **1. Comments**

##### **a. Eligibility Criteria**

77. Adoption of Section 214(e)(1) Criteria. A broad cross-section of commenters supports the Joint Board's recommendation that the Commission adopt the criteria in section 214(e)(1) as the rules governing eligibility.<sup>310</sup> CNMI asserts that the Joint Board correctly determined that section 214(e) prevents carriers from offering differential rates or cream-skimming.<sup>311</sup> CompTel states that section 214(e) contains neutral, objective criteria.<sup>312</sup> SBC notes that the Joint Board's recommendation that the Commission adopt the criteria in section 214(e) as the sole criteria for eligibility is inconsistent with its recommendation that all eligible carriers must offer Lifeline service.<sup>313</sup>

78. Statutory Construction of Section 214(e). CompTel, WorldCom, AT&T, and

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<sup>308</sup> Interior reply comments at 2. *See also* Governor of Guam comments at 10.

<sup>309</sup> MFS comments at 15.

<sup>310</sup> Ameritech comments at 8; California PUC comments at 9; CNMI comments at 39; CompTel comments at 13; GCI comments at 4; Maryland PSC at 8-9; Sprint comments at 20 (but also arguing that further elaboration is necessary regarding compensation for resellers and providers of unbundled network elements); Texas PUC comments at 5; TCA comments at 3; WorldCom comments at 14; AT&T reply comments at 13-14; CPI reply comments at 12. *See also* MFS reply comments at 14; PCIA reply comments at 29.

<sup>311</sup> CNMI comments at 40.

<sup>312</sup> CompTel comments at 13.

<sup>313</sup> SBC comments at 19. *See also* GTE reply comments at 10-11 (arguing that Joint Board implicitly assumes Commission has authority to impose additional criteria beyond those in section 214(e) in recommending that eligible carriers be required to provide Lifeline).

GCI assert that the states and the Commission are precluded from adopting eligibility requirements that exceed those contained in section 214(e).<sup>314</sup> Two states and two incumbent LECs disagree and urge the Commission to clarify that states may impose equitable, competitively-neutral conditions on carriers wishing to become eligible for support for federal and state universal service funds.<sup>315</sup> GTE asserts that the use of the phrases "a carrier that receives such support" and "any such support . . ." in section 254(e) instead of the phrase "such eligible carrier" shows that more than eligibility is required to receive support.<sup>316</sup> GTE also suggests that, as it has in the Lifeline program, the Commission has the authority to condition acceptance of federal funds upon compliance with federal guidelines.<sup>317</sup> GTE contends that accepting the arguments of CompTel and WorldCom would convert section 214(e) into an entitlement, and would prevent states and the Commission from carrying out their obligations under section 254(i).<sup>318</sup> GTE further asserts that converting section 214(e) into an entitlement would preclude adoption of its proposed competitive bidding mechanism and therefore would violate the Commission's duty to fully consider all reasonable alternatives.<sup>319</sup>

79. Additional Obligations as a Condition of Eligibility. Several incumbent LECs assert that the provisions of section 214(e)(1) are insufficient to further universal service goals,

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<sup>314</sup> CompTel comments at 13 (adopting additional criteria would be contrary to section 214(e)(1) "which lists the criteria upon which a carrier '*shall be eligible* . . .'" (commenter's emphasis)); WorldCom comments at 14; AT&T reply comments at 14 (asserting that "[s]uch obligations go beyond the statute and would constitute a competitive barrier to entry"); GCI reply comments at 2-3. *See also* GCI reply comments at 3 (stating GCI is willing to provide service in all of a non-contiguous study area of a rural LEC, as long as it must comply solely with section 214(e)(1)(A) criteria).

<sup>315</sup> California PUC comments at 9-10 (stating that it has already imposed COLR obligations upon eligible carriers because otherwise service to customers in high cost areas in California would be jeopardized); Texas PUC comments at 5; SBC comments at 19, 21 (favoring quality and affordability requirements); GTE reply comments at 6 (asserting section 214(e)(1) is intended to provide threshold for eligibility, but its terms do not constitute outer limits of requirements for eligible carriers).

<sup>316</sup> GTE reply comments at 8. Section 254(e) provides, in relevant part: "A carrier that receives such support shall use that support only for the provision, maintenance, and upgrading of facilities and services for which the support is intended. Any such support should be explicit and sufficient to achieve the purposes of this section." GTE also points out that the legislative history states that "any eligible telecommunications carrier that receives such support shall only use that support [for specified purposes]," which shows that not every eligible carrier will receive support (citing the Joint Explanatory Statement at 131).

<sup>317</sup> GTE reply comments at 10. *See also* GTE reply comments at 10-11 (asserting that Joint Board's recommendation that Commission rely on service quality data collected by states to ensure that first universal service principle is implemented implies that Commission may specify guidelines with which states must comply).

<sup>318</sup> GTE reply comments at 6-9 (citing section 254(i) which states that "[t]he Commission and the States should ensure that universal service is available at rates that are just, reasonable, and affordable").

<sup>319</sup> GTE reply comments at 11-13, n.22 (citing *Brookings Muni. Tel. v. FCC*, 822 F.2d 1153, 1169 (D.C. Cir. 1987)).

and suggest that all eligible carriers should comply with carrier of last resort (COLR) obligations, or with requirements identical to those imposed on incumbent LECs at the state or federal level with respect to pricing, terms, conditions, provisioning, and quality standards.<sup>320</sup> GTE suggests that the terms of the obligation to serve should be set by each state, subject to broad federal guidelines.<sup>321</sup> GTE, along with several other commenters, disagrees with the Joint Board's conclusion that the requirements of section 214(e)(1) will prevent carriers from "cherry-picking" by offering differential rates.<sup>322</sup> GTE asserts that, in order to prevent carriers from creating specialized service packages designed to attract only the most profitable customers, the Commission should require each carrier to offer a service package that includes only the federally-supported services on a stand-alone basis at a price determined to be "affordable" by the state commission.<sup>323</sup>

80. Several incumbent LECs assert that the Joint Board's recommendation not to impose additional criteria is in conflict with its recommended principle of competitive neutrality because some carriers must perform more burdensome and costly functions than other carriers for the same compensation.<sup>324</sup> Ameritech explains that incumbent LECs incur higher costs than other carriers because their unique regulatory obligations require them to: 1) support a network that is capable of handling traffic at the busiest times; 2) incur financial risk associated with the inability to cease providing service if providing service becomes financially detrimental; 3) incur financial risk associated with stranded investment; and, 4) at least with respect to some incumbent LECs, provide equal access.<sup>325</sup> In its *Cherry-Wildman Report*, Ameritech asserts that

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<sup>320</sup> See, e.g., Ameritech comments at 8; Ameritech comments, app. A at 37-42; Cincinnati Bell comments at 7-8; Evans Tel. Co. comments at 12-13 (requiring carrier to advertise throughout service area, if carrier cannot serve entire area, is insufficient); GTE comments at 47-50; Roseville Tel. Co. comments at 16; SBC comments at 19-20 (asserting that "the Joint Board should have gone further . . ."); USTA comments at 23-24; CWA reply comments at 9-10; USTA reply comments at 14.

<sup>321</sup> GTE comments at 18, 47. See also CPI reply comments (broad federal guidelines will provide guidance to states in advance of preemption proceedings).

<sup>322</sup> GTE comments at 16; GTE reply comments at 14-16. Accord Ameritech comments at 9 n.15; Ameritech comments, app. A at 14-15 ("it would be virtually impossible to police the marketing plans of multiple providers . . . to ensure that information on competitive offerings is not selectively targeted . . ."); TCA comments at 3-4; CWA reply comments at 9-10.

<sup>323</sup> GTE comments at 16, 49-50; USTA at 24; GTE reply comments at 19. This argument is also addressed *supra* in section IV.

<sup>324</sup> Ameritech comments at 7-8, 9; GTE comments at 13-14, 48; SBC comments at 22; CWA reply comments at 10; GTE reply comments at 17. *Contra* CPI reply comments at 12-13 (asserting that adoption of additional eligibility requirements would violate principle of competitive neutrality).

<sup>325</sup> Ameritech comments at 8-9. Accord SBC comments at 22. Ameritech states "when the supply of a product or service is characterized by substantial sunk costs, the risk that customers may turn to an alternative supplier after sunk costs have been incurred increases the price at which a firm will be willing to offer service . . ." Ameritech comments, app. A at 9 (citing Goldberg, *Relational Exchange*, 23 American Behavioral Scientist

imposing COLR obligations asymmetrically on some carriers without compensating those carriers for the costs of those obligations is not sustainable.<sup>326</sup> Ameritech asserts that an asymmetrical burden will favor less efficient firms that are free from such burdens, and asserts that, in extreme circumstances, carriers that retain these obligations may be driven from the industry altogether.<sup>327</sup>

81. PCIA disagrees with the proposals to impose additional eligibility criteria and asserts that competitive neutrality does not require that all carriers be subject to the same regulation, rather it requires that the Commission account for the fact that different carriers operate in different competitive environments.<sup>328</sup> MFS asserts that the Commission should not impose COLR obligations as a component of eligibility because such a requirement would be administratively difficult to implement, and would not be competitively neutral because it would create a cost disadvantage for some carriers that might otherwise serve low-income and high cost customers.<sup>329</sup>

82. GTE, SBC, and USTA further assert that incumbent LECs with COLR obligations are likely to be forced to serve the least profitable customers because they believe that, unless symmetrical regulations are imposed, competitive carriers will be able to "cream-skim" the most profitable customers.<sup>330</sup> They allege that averaged levels of universal service support COLR carriers receive are unlikely to be sufficient for serving just the highest cost customers in an area.<sup>331</sup> Ameritech and GTE observe that if all subscribers could be served at cost or at a profit, states would not need to impose COLR obligations.<sup>332</sup>

83. WinStar asserts that the Commission should amend the Joint Board's recommendation that, to be eligible, a carrier must offer service to all low-income customers in a service area because, as a practical matter, it may be technically infeasible for a wireless carrier to offer service to some customers.<sup>333</sup> SBC opposes WinStar's argument, stating that this

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337-352 (1980), Goldberg, *Regulation and Administered Contracts*, 7 Bell J. of Econ. 426-448 (1976)).

<sup>326</sup> Ameritech comments, app. A at 15-16.

<sup>327</sup> Ameritech comments, app. A at 8-9.

<sup>328</sup> PCIA reply comments at 29.

<sup>329</sup> MFS reply comments at 14.

<sup>330</sup> GTE comments at 17-18; SBC comments at 19; GTE reply comments at 14-16.

<sup>331</sup> *Id.*

<sup>332</sup> Ameritech comments at 10; Ameritech comments, app. A at 15; GTE reply comments at 19.

<sup>333</sup> WinStar comments at 12-13 (stating that WinStar's 39 GHz technology allows WinStar to offer service only to customers within line-of-sight of WinStar's facilities).

obligation is one of the risks associated with being a facilities-based carrier, and part of the obligation incumbent LECs shoulder every day.<sup>334</sup>

84. Several commenters suggest other criteria that they believe should be imposed upon eligible carriers. SBC and USTA assert that if it fails to ensure that eligible carriers comply with some level of regulation regarding quality of service and affordability, the Commission will also fail to ensure that carriers provide "quality" services, as required by the first universal service principle.<sup>335</sup> The Ohio PUC suggests that, in order to qualify as eligible, non-rural carriers should be required to provide interconnection to other certified local carriers and to unbundle and resell their services because it believes this would further the principle of competitive neutrality.<sup>336</sup> MFS asserts that the Commission should adopt, as a prerequisite for receipt of federal funds, the standards that the Rural Utilities Service (RUS) imposes upon its borrowers.<sup>337</sup> If carriers demonstrate that it is technically infeasible to meet these standards because of exogenous factors, such as limited spectrum in the case of wireless providers, MFS suggests that the Commission, consistent with the principle of competitive neutrality, grant waivers to such providers.<sup>338</sup> CWA asserts that the Commission should prevent telecommunications carriers that violate the National Labor Relations Act from receiving universal service support for the twelve-month period following a National Labor Relations Board decision of a labor-law violation.<sup>339</sup> CWA asserts that such a rule would promote competitive neutrality by preventing carriers from illegally suppressing labor costs, would promote rapid provision of high-quality services, and would increase the growth of high-wage, high-skill jobs.<sup>340</sup> CWA cites federal regulations for Head Start, the Job Training Partnership Act (JTPA), and Medicare as precedent for this recommendation.<sup>341</sup>

85. Treatment of Particular Classes of Carriers. Time Warner advocates excluding

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<sup>334</sup> SBC reply comments at 7.

<sup>335</sup> SBC comments at 20; USTA at 23. Section 254(b)(1) states: "Quality services should be available at just, reasonable, and affordable rates." 47 U.S.C. § 254(b)(1).

<sup>336</sup> Ohio PUC reply comments at 3-4 (*citing* Ohio PUC's petition for reconsideration of *Local Competition Order*).

<sup>337</sup> MFS comments at 7.

<sup>338</sup> MFS comments at 11.

<sup>339</sup> CWA reply comments at 8.

<sup>340</sup> CWA reply comments at 9.

<sup>341</sup> CWA reply comments at 9. CWA states that Head Start and JTPA regulations prohibit recipients from using funds to "assist, promote, or deter union organizing" 29 U.S.C. § 1553(c)(1), 42 U.S.C. § 9839(e), and Medicare regulations prohibit recipients from using funds "directly related to influencing employees respecting unionization" 42 U.S.C. § 1395x(v)(1)(N).



carriers subject to price cap regulation from eligibility to receive universal service support. Time Warner asserts that these carriers possess sufficient flexibility to permit internal funding of universal service obligations.<sup>342</sup> Time Warner suggests that, as a safety net, the Commission allow carriers subject to price cap regulation to petition state commissions to receive universal service support if they demonstrate that their universal service obligations are not allowing them to earn a fair return.<sup>343</sup> Sprint opposes Time Warner's position. First, Sprint asserts that most LECs' local service offerings have not been subject to price cap regulation.<sup>344</sup> Second, Sprint asserts that, because states require carriers to maintain low basic service prices, price cap LECs will not be able to fund universal service obligations internally.<sup>345</sup>

86. Vanguard and Centennial state that the Commission should confirm the ability of wireless providers to be designated eligible for universal service support.<sup>346</sup> Centennial urges the Commission to clarify that a state may not use the terms of section 332(c)(3)(A) to deny a CMRS provider eligible status.<sup>347</sup> Celpage indicates that the "narrow" definition of eligible carriers recommended by the Joint Board precludes most CMRS providers from meeting the eligibility criteria because they will not be able to offer all the supported services.<sup>348</sup> NYNEX, supported by CWA, expresses concern that it may be difficult to determine whether a CMRS provider is actually providing service to a customer and asserts, therefore, that a wireless carrier should receive support only if the wireless carrier is a customer's primary carrier and the customer pays unsubsidized rates for its wireline service.<sup>349</sup> PCIA opposes this proposal.<sup>350</sup> PCIA states that federal laws against fraud sufficiently protect against any attempt by CMRS

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<sup>342</sup> Time Warner comments at 12 n.14.

<sup>343</sup> Time Warner comments at 12 n.14.

<sup>344</sup> Sprint reply comments at 17-18.

<sup>345</sup> Sprint reply comments at 17-18. *Accord* Ameritech comments at 10 (as competition increases, COLR's ability to recover costs through prices of other services is significantly reduced).

<sup>346</sup> Vanguard comments at 2; Centennial reply comments at 13. *Accord* Motorola reply comments at 16-17.

<sup>347</sup> Centennial reply comments at 13. Section 332(c)(3)(A) prohibits a state, in certain circumstances, from "regulat[ing] the entry of or the rates charged by any commercial mobile service or any private mobile service . . . ." 47 U.S.C. § 332(c)(3)(A).

<sup>348</sup> Celpage comments at 14-15; Celpage reply comments at 3. See also Arch comments at 4 (stating that, because paging companies will not be able to offer all supported services, they should contribute at a lower rate than other contributing carriers). *Cf.* Centennial reply comments at 12-13 (Centennial expects to be able to provide all services necessary to qualify for universal service support).

<sup>349</sup> NYNEX comments at 5-6 (asserting that, because there is no dedicated loop for wireless service, wireless carrier could claim it was providing universal service to customer even if customer does not use, or own, mobile phone); CWA reply comments at 10-11.

<sup>350</sup> PCIA reply comments at 32.

carriers to seek universal service support for customers that they do not serve, and asserts that additional requirements placed solely on wireless carriers would discriminate against these carriers.<sup>351</sup>

87. Advertising. WorldCom suggests that the Commission should advise states not to impose specific or extensive advertising requirements, especially if they would unduly burden new entrants. WorldCom asserts that competition by itself should prove more than sufficient to spur advertising.<sup>352</sup> Roseville Tel. Co. asserts that the Commission should make explicit that the section 214(e) requirement that carriers advertise in "media of general distribution" is not satisfied by placing advertisements in business publications alone, but compels carriers to advertise in publications targeted to the general residential market.<sup>353</sup> CPI states that although it recommended that the Commission should not create national standards for advertising, the Joint Board did not adopt any recommendation regarding the meaning of the term "throughout" as that term appears in section 214(e).<sup>354</sup>

#### **b. Section 214(e)(1) Facilities Requirement**

88. Section 214(e)(1) Facilities Requirement. Several commenters contend that it will be difficult to determine whether the section 214(e)(1) facilities requirement has been met, and urge the Commission to clarify its meaning.<sup>355</sup> Noting that the Commission sought comment on this issue in its *Infrastructure Sharing NPRM*, EXCEL alleges that there is no commonly accepted definition of the term "facilities" or "facilities-based carrier."<sup>356</sup> Commenters contend that the section 214(e)(1) facilities requirement could require a carrier to perform any of the following: construct and maintain its own loop facilities serving at least 20 percent of its customers;<sup>357</sup> use its own loop and switching facilities;<sup>358</sup> use its own switch in combination with

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<sup>351</sup> PCIA reply comments at 32 (*citing*, in part, 47 U.S.C. § 1001).

<sup>352</sup> WorldCom comments at 16.

<sup>353</sup> Roseville Tel. Co. comments at 16.

<sup>354</sup> CPI reply comments at 13 n.24.

<sup>355</sup> EXCEL comments at 9. *Accord* Telco comments at 6; TRA comments at 13; CPI reply comments at 13.

<sup>356</sup> EXCEL comments at 8-9 (*citing* Infrastructure Sharing Provisions in the Telecommunications Act of 1996, *Notice of Proposed Rulemaking*, CC Docket 96-237, FCC 96-456 (rel. Nov. 22, 1996)).

<sup>357</sup> Lufkin-Conroe reply comments at 16.

<sup>358</sup> Cathey, Hutton comments at 7.

resold service;<sup>359</sup> construct a single, short loop;<sup>360</sup> install one mile of fiber;<sup>361</sup> make a *de minimis* use of its own facilities;<sup>362</sup> use its own switch to provide exchange access for billing purposes;<sup>363</sup> or, own a billing office.<sup>364</sup> EXCEL indicates that the Commission could probably not adopt the most restrictive interpretation of the section 214(e)(1) facilities requirement -- that a carrier must use its own facilities to provide every aspect of every supported service -- because, for example, carriers would have difficulty providing access to directory assistance using their own facilities.<sup>365</sup> A number of commenters urge the Commission to determine that provisioning service through the use of unbundled network elements is sufficient to meet the section 214(e)(1) facilities requirement.<sup>366</sup> CompTel asserts that the Joint Board appears to support interpreting unbundled network elements as a carrier's own facilities when it states that a carrier may meet the eligibility criteria "regardless of the technology used by that carrier."<sup>367</sup> Lufkin-Conroe vigorously opposes classifying the purchase of unbundled network elements as sufficient to meet the section 214(e)(1) facilities requirement.<sup>368</sup> Lufkin-Conroe asserts that the purpose of the section 214(e)(1) facilities requirement, particularly when considered in combination with the requirements of sections 214(e)(3) and (e)(4), is to ensure the construction and maintenance of "adequate physical facilities to serve each area."<sup>369</sup> Lufkin-Conroe asserts that allowing a provider to obtain universal service support after purchasing just one unbundled network element does not further this purpose.<sup>370</sup> EXCEL urges the Commission to prohibit states from

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<sup>359</sup> Telco comments at 6.

<sup>360</sup> SBC comments at 21.

<sup>361</sup> EXCEL comments at 9.

<sup>362</sup> MFS reply comments at 13 n.32

<sup>363</sup> EXCEL comments at 9.

<sup>364</sup> EXCEL comments at 9.

<sup>365</sup> EXCEL comments at 10.

<sup>366</sup> CompTel comments at 13; EXCEL comments at 7; Telco comments at 6-7 (*citing* TRA Recommended Decision comments at 9); WorldCom comments at 14-15 (stating purchaser of unbundled network elements steps into shoes of incumbent and becomes facilities provider); AT&T reply comments at 12-13. Several other commenters concede that purchasers of unbundled network elements deserve at least some support. *See, e.g.*, Cathey, Hutton comments at 5; NYNEX comments at 35; PacTel comments at 24; SBC comments at 22.

<sup>367</sup> CompTel at 14 (*citing* Recommended Decision, 12 FCC Rcd at 169).

<sup>368</sup> Lufkin-Conroe reply comments at 14. *Accord* Bell Atlantic comments at 3 n.7.

<sup>369</sup> Lufkin-Conroe reply comments at 14-15. *Accord* GVNW comments at 8; RT comments at 11; Tularosa Basin Tel. comments at 10; KMC reply comments at 9.

<sup>370</sup> Lufkin-Conroe reply comments at 14-15.

defining the term "facilities" differently from the definition adopted by the Commission.<sup>371</sup>

89. MFS suggests that the policy underlying the section 214(e)(1) facilities requirement is to prevent double recovery by preventing both a reseller and the underlying wholesaler from receiving compensation for a single customer.<sup>372</sup> MFS asserts the Commission should give effect to section 214(e)(1) by including "pure" resellers and limiting the potential for double recovery by explicitly reflecting subsidies on customer bills.<sup>373</sup>

90. Telco asserts that the Commission should interpret the term "facilities" consistently for purposes of sections 251(c)(2) and 214(e)(1).<sup>374</sup> Telco asserts that, because section 251(c)(2) states incumbent LECs have the "duty to provide, for the *facilities and equipment of any requesting telecommunications carrier*, interconnection with the local exchange carrier's network" the Commission should determine that resellers that provide universal service through interconnection arrangements or the purchase of unbundled network elements are eligible for universal service support.<sup>375</sup> TRA states that the Commission declined to impose a facilities requirement on requesting carriers under section 251(c)(3) because the Commission determined that "it would be administratively impossible"<sup>376</sup> and concluded that any facilities requirement it could construct "would likely be so easy to meet it would ultimately be meaningless."<sup>377</sup>

91. Eligibility of Resellers. Several commenters, mostly representing incumbent LECs, support the Joint Board's conclusion that the explicit language of section 214(e)(1) precludes "pure" resellers from eligibility.<sup>378</sup> On the other hand, several commenters, mostly representing resellers, indicate that the Joint Board's conclusion was not compelled by the statutory language and assert that the Commission should adopt an interpretation of section

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<sup>371</sup> EXCEL comments at 10. *See also* WorldCom comments at 15 (urging Commission to require states to recognize unbundled network elements for this purpose); CPI reply comments (asserting that requiring carriers to deploy their own separate networks will inhibit competition in high cost areas).

<sup>372</sup> MFS comments at 17. *Contra* USTA reply comments at 14.

<sup>373</sup> MFS comments at 17-18.

<sup>374</sup> Telco comments at 7.

<sup>375</sup> Telco comments at 7 (*citing* 47 U.S.C. § 251(c)(2) (commenter's emphasis)).

<sup>376</sup> TRA comments at 12 (*citing Local Competition Order*, 11 FCC Rcd at 15,670).

<sup>377</sup> TRA comments at 13 (*citing Local Competition Order*, 11 FCC Rcd 15,670).

<sup>378</sup> *See, e.g.,* Cathey, Hutton comments at 5; GVNW comments at 8; RT comments at 11; SBC comments at 21; CPI reply comments at 14; RTC reply comments at 22. *See also* GTE reply comments at 60; Lufkin-Conroe reply comments at 15-16; RTC reply comments at 22-23.

214(e)(1) that would not exclude resellers from eligibility.<sup>379</sup> EXCEL, MFS, Telco and TRA assert that excluding "pure" resellers violates the Joint Board's recommended principle of competitive neutrality.<sup>380</sup> EXCEL and Telco assert it is not competitively neutral to require resellers to contribute to the fund, but not allow them to be compensated from the fund.<sup>381</sup> TRA and Telco assert that denying resellers eligibility will deprive higher cost customers of the lower prices and improved services brought on by competition.<sup>382</sup> TRA indicates that the exclusion of resellers contradicts the Joint Board's finding that "wholesale exclusion of classes of carriers from eligibility is inconsistent with the plain language of the 1996 Act."<sup>383</sup> TRA states that elsewhere the Commission has determined that "competitive neutrality" means that "no carrier be significantly disadvantaged in its 'ability to compete with other carriers for customers in the marketplace.'"<sup>384</sup> Several commenters contend that EXCEL's and TRA's arguments ignore the plain language of the statute, and should not be adopted.<sup>385</sup> Lufkin-Conroe asserts that allowing resellers to receive universal service support would do nothing to improve the quality of service, increase access to advanced services, or enhance the comparability of rural services.<sup>386</sup>

92. EXCEL, Telco, and TRA assert that, if the Commission feels compelled to adopt the statutory interpretation of the section 214(e)(1) facilities requirement recommended by the Joint Board, the Commission should forbear from that requirement.<sup>387</sup> EXCEL and Telco assert

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<sup>379</sup> EXCEL comments at 3; MFS comments at 16-18; Telco comments at 6; TRA comments at 10-11. *See also* AT&T reply comments at 12 n.10 ("AT&T does not necessarily concur with the Joint Board that carriers providing local service through resale alone do not satisfy section 214(e)(1)'s requirements . . ."); KMC reply comments at 9.

<sup>380</sup> EXCEL comments at 3, 5; MFS comments at 17; Telco comments at 7-8; TRA comments at 10, 14 (asserting that exclusion denies resale carriers revenue streams that are comparable to other carriers).

<sup>381</sup> EXCEL comments at 5; Telco comments at 7-8

<sup>382</sup> Telco comments at 8; TRA comments at 15.

<sup>383</sup> TRA comments at 15 (*citing* Recommended Decision, 12 FCC Rcd at 171).

<sup>384</sup> TRA comments at 10 (*citing* Telephone Number Portability, *Report and Order*, 11 FCC Rcd 8352 at para. 131 (1996)).

<sup>385</sup> GTE reply comments at 60; Lufkin-Conroe reply comments at 15-16; RTC reply comments at 22-23.

<sup>386</sup> Lufkin-Conroe reply comments at 15.

<sup>387</sup> EXCEL comments at 11-13; Telco comments at 8-10; TRA comments at 15-16. In order for the Commission to exercise its forbearance authority with respect to a provision of the Act, it must determine that: 1) enforcement of the provision "is not necessary to ensure that the charges, practices, classifications, or regulations by, for, or in connection with that telecommunications carrier or telecommunications service are just and reasonable and are not unjustly or unreasonably discriminatory;" 2) enforcement of such provision "is not necessary for the protection of consumers;" and 3) "forbearance from applying such provision . . . is consistent with the public interest." 47 U.S.C. § 160(a). In addition, the Commission must consider "whether forbearance . .

that the three statutory criteria for forbearance have been met.<sup>388</sup> They state that the first prong of the test is met because the restriction itself is discriminatory: resellers, unlike other carriers, will not be able to recover the costs of serving high cost consumers without universal service support.<sup>389</sup> EXCEL and Telco assert that the second prong is met because so long as they receive the services that are supported by federal universal service support mechanisms, it makes no difference to consumers whether the carrier is using its own facilities. Supported by TRA, EXCEL and Telco assert that enforcing the restriction may harm consumers by limiting consumers' choices and will deprive eligible consumers of the benefits of competition.<sup>390</sup> TRA asserts that the Commission has recognized the importance of resale as an entry vehicle for small businesses and other new entrants.<sup>391</sup> Finally, these commenters assert that, as the Commission found in the *Local Competition Order*, requiring carriers to own some local exchange facilities does not promote competition.<sup>392</sup> Relying on the Commission's language in the *Local Competition Order*, cited above, TRA asserts that there is no policy rationale for requiring a carrier to own a single piece of equipment, and thus encourages the Commission to forbear from enforcing the "meaningless" section 214(e)(1) facilities requirement.<sup>393</sup>

### c. Requirements of Section 254(e) Pertaining to Intended Uses of Universal Service Funds

93. Ensuring Universal Service Support is Used as Intended. The North Dakota PSC supports the Joint Board's recommendation that the Commission conduct periodic reviews to ensure that universal service is being provided if a state has insufficient resources to support monitoring programs.<sup>394</sup>

### C. Definition of Service Areas

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. will promote competitive market conditions." 47 U.S.C. § 160(b).

<sup>388</sup> EXCEL comments at 12; Telco comments at 8-9. *See also* TRA comments at 15-16.

<sup>389</sup> EXCEL comments at 12; Telco comments at 8-9.

<sup>390</sup> EXCEL comments at 12; Telco comments at 9-10 (asserting that competition will lower prices, increase incentives for innovation, and increase consumer choice); TRA comments at 15 (asserting that competitive pressures will improve rates and services). *Accord* KMC reply comments at 9. TRA notes that the Joint Board acknowledged unnecessary restrictions on eligibility could "chill competitive entry into high cost areas" in the case of the schools and libraries program. TRA comments at 15 (*citing* Recommended Decision at para. 156).

<sup>391</sup> TRA comments at 12.

<sup>392</sup> EXCEL comments at 12 (*citing Local Competition Order*, 11 FCC Rcd at 15,670). *See also* Telco comments at 9-10; TRA comments at 15; KMC reply comments at 9.

<sup>393</sup> TRA comments at 15-16.

<sup>394</sup> North Dakota PSC comments at 2.

## 1. Comments

### a. Non-Rural Service Areas

94. Non-Rural Service Areas. WorldCom and the Maryland PSC support the Joint Board's finding that states have primary responsibility for designating the service area.<sup>395</sup> AT&T asserts that, although state commissions have the authority to define service areas, if they fail to designate service areas that are coincident with the zones for unbundled network elements, this action would contravene the requirements of section 253. AT&T reasons that such a decision by a state commission might require a purchaser of unbundled network elements to pay more for that unbundled network element than it could recover from the customer and from universal service support mechanisms, thus precluding a carrier using unbundled network elements from competing in a high cost area.<sup>396</sup> Nextel asserts that the Commission has authority to alter rural service areas.<sup>397</sup>

95. A number of non-incumbent LECs support the Joint Board's recommendation that the Commission encourage states to designate service areas that are not "unreasonably large."<sup>398</sup> PacTel indicates that any averaging of costs across a large geographical area will penalize carriers that serve states with a mix of high cost and low cost areas.<sup>399</sup> CTIA agrees with the Joint Board's conclusion that state designation of an unreasonably large service area may violate section 253.<sup>400</sup> Cox and PCIA favor service areas that are as small as possible. Cox and PCIA reason that small service areas will be easier for new entrants to serve, thus encouraging competition which will benefit consumers and, in the long run, will reduce the need for universal service support as prices are driven down.<sup>401</sup> PCIA, supported by Sprint PCS, suggests that the Commission "emphatically" recommend to the state commissions that they design all services areas, rural and non-rural, according to census blocks.<sup>402</sup> WorldCom, along with APC, asserts that incumbent LECs should not be unduly advantaged by designation of service areas that

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<sup>395</sup> Maryland PSC comments at 7; WorldCom comments at 15. *See also* Bell Atlantic at 14.

<sup>396</sup> AT&T reply comments at 13.

<sup>397</sup> Nextel comments at 10 n.22 (*citing* 47 U.S.C. § 214(e)(5)).

<sup>398</sup> GCI comments at 4; CTIA comments at 5 (this will encourage CMRS entry into supported areas). *See also* Teleport comments at 4; WorldCom comments at 15; MCI reply comments at 1-2.

<sup>399</sup> PacTel comments at 25, n.41.

<sup>400</sup> CTIA comments at 5 n.10. *See also* Teleport comments at 5 ("areas should not be so large as to violate the principle of competitive neutrality or the federal statute's prohibition on barriers to entry").

<sup>401</sup> Cox comments at 6; PCIA reply comments at 33. *See also* Sprint PCS comments at 8 (stating that CBGs are more homogeneous than wire centers or current service areas).

<sup>402</sup> PCIA reply comments at 34; Sprint PCS comments at 8-9.

correspond closely or precisely to the contours of their existing facilities.<sup>403</sup> Teleport asserts that service areas should be consistent with the cost study parameters adopted by the Commission to calculate the level of high cost support, and that no carrier should be required to serve an area larger than that used for the cost study area.<sup>404</sup> CPI suggests that the Commission adopt guidelines to assist state commissions in determining the size of each service area.<sup>405</sup>

96. Ability of Commission to base support on areas smaller than state-designated service areas. SBC and Sprint PCS support the Joint Board's determination that the Commission can base high cost support on a geographic area that differs from a service area established by a state commission.<sup>406</sup> Bell Atlantic disagrees, contending that section 214(e)(5) gives the states exclusive authority to establish non-rural service areas "for the purpose of determining universal service obligations *and support mechanisms*."<sup>407</sup>

## **b. Rural Service Areas**

97. Service Areas Served by Rural Telephone Companies. A majority of parties who commented on this issue support the Joint Board's recommendation to adopt rural study areas as the service areas in geographic areas served by a rural telephone company.<sup>408</sup> Several entities representing the interests of rural LECs assert this decision will ensure that "cream-skimming" will not occur in rural areas.<sup>409</sup> Minnesota Coalition asserts that this decision is consistent with other provisions of the 1996 Act that make clear that competition in rural areas should not occur in a manner that harms universal service.<sup>410</sup> Minnesota Coalition also agrees with the Joint Board that adopting rural study areas as service areas would reduce the costs of implementing the program because rural LECs' accounting systems are designed to be applied to an entire

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<sup>403</sup> Teleport comments at 5; WorldCom comments at 15; APC reply comments at 4 (citing Recommended Decision, 12 FCC Rcd at 181). *See also* WinStar comments at 13 (asserting it may be technologically infeasible for some carriers to offer service to all customers in a service area).

<sup>404</sup> Teleport comments at 5.

<sup>405</sup> CPI reply comments at 11-12.

<sup>406</sup> SBC comments at 31-32; Sprint PCS comments at 9. *See also* USTA comments at 31 (stating that all carriers should have an opportunity to receive universal service support for geographic areas that are smaller than their serving areas).

<sup>407</sup> Bell Atlantic comments at 14 (*citing* 47 U.S.C. § 214(e)(5) (commenter's emphasis)).

<sup>408</sup> GCI comments at 4; GVNW comments at 8; RT comments at 11; TCA comments at 3; Tularosa Basin Tel. comments at 10-11; United Utilities comments at 2; Virginia's Rural Tel. Cos. comments at 2.

<sup>409</sup> GVNW comments at 8-9; Minnesota Coalition comments at 40; RT comments at 11.

<sup>410</sup> Minnesota Coalition comments at 40-41 (*citing* 47 U.S.C. § 253(f), which allows a state to require any competitive provider in a rural area to meet the requirements of section 214(e)(1) and section 214(e)(2), which requires the state to find that designating multiple carriers in a rural area is in the public interest).



study area, and adopting this approach avoids the costs and difficulties of attempting to determine embedded costs for a different service area.<sup>411</sup> ITC asserts that retaining study areas for rural carriers while allowing non-rural service areas to be variable in size may result in inequities because current study areas often incorporate a small urban area that lowers the average cost per loop, while the newly designated non-rural service areas may not.<sup>412</sup> TCA expresses concern regarding the Joint Board's recommendation that "existing" rural study areas be used as rural service areas.<sup>413</sup> TCA indicates that when a rural study area is modified, the corresponding service area should also be modified accordingly.<sup>414</sup>

98. Several parties, including parties representing primarily wireless interests, assert that the Joint Board neglected to account for the fact that many rural study areas are non-contiguous when it recommended that rural LECs' study areas be used as rural service areas for purposes of section 214(e).<sup>415</sup> Cox, Nextel, and Vanguard assert that adoption of this recommendation could impede wireless providers from qualifying for universal service support, in part because some wireless carriers are licensed within geographic regions with prescribed boundaries or are licensed on a station-by-station basis.<sup>416</sup> Vanguard indicates that the analysis that led the Joint Board to recommend that states not designate unreasonably large service areas also dictates that the size and distribution of rural service areas not inhibit competition.<sup>417</sup> GCI states that it is willing to provide service in all of a non-contiguous study area of a rural LEC, as long as the Commission does not impose criteria in addition to the criteria included in section 214(e)(1)(A).<sup>418</sup>

99. Rather than using rural study areas, Cox suggests that new entrants should be required to serve only the entire contiguous portion of a rural LEC's study area because it will give competitors a fair chance to obtain universal service support while protecting rural carriers

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<sup>411</sup> Minnesota Coalition comments at 43.

<sup>412</sup> ITC reply comments at 9-10.

<sup>413</sup> TCA comments at 4 (*citing* Recommended Decision, 12 FCC Rcd at 179).

<sup>414</sup> TCA comments at 4.

<sup>415</sup> Cox comments at 7; Nextel comments at 9; Vanguard comments at 4. *Accord* CPI reply comments at 10 ("CPI recognizes the practical difficulties of adopting service areas that are different from the companies' study areas at this time").

<sup>416</sup> Cox comments at 7-8; Nextel comments at 9-10 (emerging CLECs and CAPs are financially and practically limited to providing service in distinct regions); Vanguard comments at 4-5. *Accord* CPI reply comments at 10.

<sup>417</sup> Vanguard comments at 5 (*citing* Recommended Decision, 12 FCC Rcd at 181).

<sup>418</sup> GCI reply comments at 3

from "cream-skimming."<sup>419</sup> Cox suggests that this approach would be consistent with the Commission's current standards for modifying study areas which require carriers to demonstrate that modifications will not increase universal service costs.<sup>420</sup> In the alternative, Cox asserts that carriers could provide the core services throughout a service area.<sup>421</sup> Cox asserts that allowing providers to offer the core services cooperatively will alleviate difficulties in serving contiguous and non-contiguous service areas.<sup>422</sup> Vanguard and Nextel support defining a service area as the area in which a service provider is seeking to serve customers, citing examples of a telephone franchise area or a wireless company's service area.<sup>423</sup> Nextel indicates that adopting this definition would be consistent with the competitive neutrality principle, and is also consistent with the Joint Board's recommendation regarding the analogous requirement for providers that offer supported services to schools and libraries.<sup>424</sup> Vanguard indicates its proposed definition of a rural service area is consistent with the language of section 214(e)(5) which recognizes that a rural LEC's study area may not be appropriate for determining universal service support eligibility.<sup>425</sup> Vanguard clarifies that CMRS service areas have been determined carefully by the Commission and that the Commission has adopted explicit build-out obligations for the provision of service throughout a given geographic region.<sup>426</sup> Thus, Vanguard asserts that if a wireless company's service area was adopted as its section 214 service area, CMRS providers would not be able to provide service only to the most lucrative consumers in an areas, as some LECs allege.<sup>427</sup>

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<sup>419</sup> Cox comments at 8. *Accord* Nextel comments at 10-11; Vanguard comments at 5.

<sup>420</sup> Cox comments at 8.

<sup>421</sup> Cox comments at 8.

<sup>422</sup> Cox comments at 8 (explaining that, in many cities, cable franchises are split between two cable providers and indicating that allowing cable operators to cooperate to serve entire service area would allow them to serve whole city).

<sup>423</sup> Nextel comments at 10-11; Vanguard comments at 5.

<sup>424</sup> Nextel comments at 10-11, *citing* Recommended Decision, 12 FCC Rcd at 364 ("using an expansive definition of geographic area might be unfair to a small telephone company serving a single community . . . for such a definition would permit it to be compelled to serve other schools outside its geographic market"). Under section 254(h)(1)(B), schools and libraries are entitled to receive discounts for services provided by any telecommunications carrier serving a geographic area. *See* Recommended Decision, 12 FCC Rcd at 364. The Joint Board recommended that the term "geographic area" in section 254(h)(1)(B) mean the area in which the service provider is seeking to serve customers. *Id.*

<sup>425</sup> Vanguard comments at 5-6.

<sup>426</sup> Vanguard reply comments at 3-4.

<sup>427</sup> Vanguard reply comments at 3-4.

## **D. Unserved Areas**

### **1. Comments**

100. TCA, the lone commenter on the Joint Board recommendation on this issue, asserts that rules for unserved areas are a state matter under section 102 of the 1996 Act.<sup>428</sup> TCA indicates that any federal pronouncements in this area should state that no federal intervention is needed.<sup>429</sup>

## **VII. RURAL, INSULAR, AND HIGH COST**

### **A. Overview**

101. The following is a summary of the comments relating to the rural, insular, and high costs issues.

### **B. Universal Service Support Based on Forward-Looking Economic Cost**

#### **1. Scope of Cost to be Supported**

102. Forward-looking Costs. Many of the commenters agree with the Joint Board's recommendation that we base universal service support on the forward-looking costs of constructing and operating the network used to provide the services included in the list of services adopted pursuant to section 254(c)(1).<sup>430</sup> Several commenters contend that basing support mechanisms on forward-looking costs best reflects the costs of an efficient operator, thereby facilitating the transition to a competitive environment.<sup>431</sup> The Business Software Alliance and MCI contend that the use of forward-looking costs offers the correct economic incentives for carriers deciding how to invest, including whether to enter a new market.<sup>432</sup> The CNMI Representative suggests that using forward-looking costs would permit support levels to reflect not only costs, but also the realities of supply and demand.<sup>433</sup> ITI states that the use of forward-looking costs would ensure that universal service support corresponds to the true costs

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<sup>428</sup> Section 102 of the 1996 Act added section 214(e) to the Communications Act of 1934.

<sup>429</sup> TCA comments at 4.

<sup>430</sup> *See, e.g.*, ITAA comments at 2; Texas PUC comments at 5; PCIA reply comments at 25.

<sup>431</sup> *See, e.g.*, Sprint comments at 4; Chicago reply comments at 13; CPI reply comments at 2.

<sup>432</sup> Business Software Alliance comments at 9-10; MCI reply comments at 2. *See also* AT&T/MCI model reply comments at 2.

<sup>433</sup> CNMI Representative reply comments at 2.

of providing the service.<sup>434</sup> AirTouch states that using forward-looking costs, and breaking the link between the carrier's embedded costs and the support level, will create price-cap-like incentives for efficient cost reduction.<sup>435</sup>

103. Other commenters disagree, however, and contend that the use of forward-looking costs will produce uncertainty and inaccuracy, because they claim that such cost figures are volatile, subjective, and unverifiable.<sup>436</sup> Several commenters argue that because they prevent carriers from recovering substantial portions of their infrastructure investment these forward-looking assumptions render it irrational to make future investments.<sup>437</sup> John Staurulakis adds that use of forward-looking costs undermines Congress's intent to promote facilities-based competition.<sup>438</sup> The California SBA contends that using the least-cost, most-efficient technology standard will likely underestimate the real cost of providing the supported services in high cost areas because few if any carriers are actually able to use such technology.<sup>439</sup> Harris agrees, stating that the newest technologies are often not available to ILECs, particularly small ILECs serving rural areas.<sup>440</sup>

104. USTA, while opposing the use of forward-looking costs, states that if such costs are used, the appropriate basis for determining forward-looking economic costs is the expected cost of an actual firm in the market, not a hypothetical entrant that would instantaneously supply the entire market. USTA argues that an actual market participant, whether an incumbent or a new entrant, may be efficient in a dynamic sense, although not in the "static" sense assumed in the proxy models.<sup>441</sup> USTA notes that the telephone industry undergoes constant technological change, and asserts that the assumption of a static environment in the models poses significant cost recovery risks for ILECs, even if they are operating efficiently.<sup>442</sup>

105. Embedded Costs. Most ILECs contend that universal service support should be

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<sup>434</sup> ITI comments at 2.

<sup>435</sup> AirTouch post-workshop comments at 4.

<sup>436</sup> *See, e.g.*, CSE Foundation comments at 6; Minnesota Coalition comments at 16-17; Western Alliance comments at 36; ITC reply comments at 5.

<sup>437</sup> Western Alliance comments at 37. *See also* SBC comments at 24; CWA reply comments at 14.

<sup>438</sup> John Staurulakis comments at 6-7.

<sup>439</sup> California SBA comments at 2.

<sup>440</sup> Harris comments at 4.

<sup>441</sup> USTA model comments at 9, att. at 5.

<sup>442</sup> *Id* at 9. *See also* California SBA comments at 2-3; GTE reply comments at 25-26; SBC reply comments at 12.

based on their embedded costs, rather than on forward-looking costs.<sup>443</sup> The ILECs assert that embedded costs more accurately reflect the real costs of providing service than forward-looking costs.<sup>444</sup> Ameritech and Puerto Rico Tel. Co. agree, stating that embedded costs accurately reflect the true costs of providing service and have been documented over time.<sup>445</sup> Tularosa Basin Tel. argues that there is no significant evidence of ILECs "goldplating" their networks through the use of universal service funds and that there is overwhelming evidence that ILECs are in fact using universal service support to bring quality services to their customers. It notes that all of its construction has been based on efficient engineering designs and competitive bidding to assure the most cost-effective infrastructure possible.<sup>446</sup>

106. SBC states that nothing in the 1996 Act suggests that the Commission should jettison the use of embedded costs as a basis for support.<sup>447</sup> ITC claims that using embedded costs is the best way to ensure that funds are used to support the network and that potential new entrants receive the correct economic signals about the cost of providing service in that area.<sup>448</sup> The commenters also contend that use of embedded costs is the only way to ensure that there is a sufficient support mechanism, as required in section 254.<sup>449</sup>

107. Many other parties oppose the use of embedded costs.<sup>450</sup> PageMart asserts that embedded costs include many unnecessary costs that should not be supported through universal service support mechanisms.<sup>451</sup> PCIA contends that such costs are based on obsolete rate-of-return regulation.<sup>452</sup> AT&T states that use of embedded costs will not allow the support mechanism to capture the full benefits of current technology.<sup>453</sup> Chicago claims that basing support on embedded costs would impose enormous burdens on customers to compensate for

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<sup>443</sup> See, e.g., Ameritech comments at 10; Minnesota Coalition comments at 18; BellSouth reply comments at 9; *contra* Sprint reply comments at 9.

<sup>444</sup> See Roseville Tel. Co. comments at 11; BellSouth reply comments at 9.

<sup>445</sup> Ameritech comments at 11; Puerto Rico Tel Co. reply comments at 12.

<sup>446</sup> Tularosa Basin Tel. comments at 3.

<sup>447</sup> SBC comments at 24.

<sup>448</sup> ITC reply comments at 5.

<sup>449</sup> See, e.g., Minnesota Coalition comments at 17; ITC reply comments at 5; SBC reply comments at 11.

<sup>450</sup> See, e.g., CSE Foundation comments at 5; Business Software Associates reply comments at 9; KMC reply comments at 3;

<sup>451</sup> PageMart comments at 6.

<sup>452</sup> PCIA reply comments at 25.

<sup>453</sup> AT&T comments at 13.

past decision making by the ILEC, no matter how faulty those decisions were. Chicago also maintains that use of embedded costs would impose a significant barrier to entry, because support would be tied to the operating decisions of ILECs.<sup>454</sup> CPI expresses concern that use of a carrier's historic costs to set the support levels would subsidize the inefficient carrier at the expense of the efficient carrier.<sup>455</sup>

108. Bell Atlantic proposes that the Commission use state-averaged embedded line costs as the basis for setting universal service support levels.<sup>456</sup> Bell Atlantic claims that averaging the costs within each state will eliminate any incentives not to be efficient that are built into the existing system because ILECs with obsolete technology or inefficient operations will not be rewarded with higher support payments than more efficient ILECs in the state. Bell Atlantic states that its proposal will also ensure that support flows to states that actually experience high cost, not just those that experience high costs in a theoretical model.<sup>457</sup>

109. "Legacy" Costs. Several ILECs assert that the Commission should modify the Joint Board's recommended approach by providing for the explicit recovery of carriers' plant and equipment investments.<sup>458</sup> These commenters contend that carriers made these investments pursuant to federal and state regulatory directives that mandated the provision of a certain level of telephone service in high cost and rural areas. Some commenters argue that any universal service support mechanism that fails to provide for recovery of the costs of an ILEC's facilities would strand the ILEC's investment and constitute a confiscation of property, in violation of the Fifth Amendment protection against takings.<sup>459</sup>

110. PacTel states that the Joint Board's recommendation that non-rural carriers move to a proxy model immediately is contrary to the Telecommunications Act and the constitutional prohibition against uncompensated takings.<sup>460</sup> Referring to plant and equipment investments as

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<sup>454</sup> Chicago reply comments at 14.

<sup>455</sup> CPI reply comments at 4.

<sup>456</sup> Bell Atlantic comments at 12.

<sup>457</sup> *Id.* at 13.

<sup>458</sup> *See, e.g.*, Minnesota Coalition comments at 17-19; RTC comments at 1-3, 6-8; Western Alliance comments at 14, 26-27.

<sup>459</sup> *See, e.g.*, Roseville Tel. Co. comments at 12; RTC comments at 2; USTA comments at 12.

<sup>460</sup> PacTel comments at 7. PacTel cites to *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 315 (1989) ("a state's decision to arbitrarily switch back and forth between methodologies in a way which required investors to bear the risk of bad investments at some times while denying them the benefit of good investments at others would raise serious constitutional questions"). *See also* Ameritech comments, att. A at 4.

"legacy" costs,<sup>461</sup> PacTel contends that any cost proxy model used to calculate the costs of support services must allow ILECs to recover their legacy costs, or in the alternative, establish a transitional legacy cost recovery mechanism.<sup>462</sup> PacTel maintains that failure to allow carriers to recover these investment costs would break a long-standing contract between government and local telephone companies, under which telephone companies are entitled to receive a fair opportunity to recover their legitimately incurred costs, including a fair return on investment.<sup>463</sup> PacTel explains that in exchange for that opportunity, ILECs committed to provide quality service to all consumers at rates set by regulators and assumed COLR obligations. PacTel asserts that regulators have often set rates based on social rather than economic policies and relied on the promise of a sustainable monopoly to defer recovery and keep rates below cost.<sup>464</sup> In addition, PacTel contends that regulatory decisions required the ILECs to recover plant and equipment investment in accordance with long depreciation schedules, and thus massive undepreciated plant and equipment remains on the ILECs' books.<sup>465</sup> PacTel states that its unrecovered investment is \$4.7 billion in excess of what it should be using accepted economic depreciation methods. It adds that it does not expect to recover that investment if the Commission adopts the Joint Board's proposal.<sup>466</sup>

111. As an alternative to providing for legacy cost recovery in the proxy model, PacTel proposes that the Commission establish a separate six-year transition mechanism that would permit ILECs to withdraw amounts from the high cost fund based on their legacy costs. CLECs would receive high cost assistance only from the forward-looking mechanism that would govern all eligible entities.<sup>467</sup> PacTel further argues that large carriers, as well as small, rural carriers, should be eligible to recover legacy costs during this transition, because they: (1) cannot simply replace lost revenues with revenues from other services because of the mandate that subsidies be explicit; (2) are less able to raise local rates to recover legacy costs than rural companies because of existing price caps; and, (3) have legacy costs per line that are comparable to those of rural carriers, despite a larger subscriber base.<sup>468</sup> PacTel also contends that should the current proceeding fail to address legacy cost recovery, the Commission should address this

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<sup>461</sup> PacTel comments at 6. PacTel defines "legacy" costs as "the costs associated with recovery (and in the interim, return on investment) for past investments in plant and equipment, previously found to be used and useful and includable in the ratebase for the purposes of providing regulated telecommunications services."

<sup>462</sup> *Id.* at 6-10.

<sup>463</sup> *Id.* at 6. *See also* SBC comments at 11-14.

<sup>464</sup> PacTel comments at 6.

<sup>465</sup> *Id.* at 7.

<sup>466</sup> *Id.*

<sup>467</sup> *Id.* at 8. *See also* PacTel reply comments at 7-9.

<sup>468</sup> *Id.* at 9.

issue in the upcoming access reform proceeding or "elsewhere."<sup>469</sup>

112. Regarding unrecovered investments in existing facilities, U S West recommends subtracting the amount of the investment that has been depreciated from the high cost investment differential described above, freezing this figure, and amortizing it over a short period. U S West suggests treating upgrades as new construction for universal service purposes.<sup>470</sup> U S West also contends that because the Commission stated in the *Local Competition Proceeding* stated that it would address embedded costs in the *Universal Service Proceeding*, and therefore, the Commission must provide for capital cost recovery in this proceeding.<sup>471</sup>

113. GTE also contends that the Commission's adoption of a proxy cost measure that systematically underestimates the ILECs' actual cost will amount to a taking of the ILECs' investments for the public good without allowing ILECs a full opportunity for recovery of prudently incurred costs.<sup>472</sup> GTE recommends that the Commission's methodology provide a mechanism for reconciling and justifying any differences between the cost estimates produced by a proxy model and the ILEC's embedded, prudently incurred costs.<sup>473</sup> In particular, GTE suggests that the Commission estimate the amount of under-depreciated investment on the ILEC's books today and establish an amortization program pursuant to which these costs would be recovered through a competitively neutral funding mechanism independent of the ILECs' own rates. GTE defends the use of a separate funding mechanism on the grounds that such deferred costs are unique to ILECs and are associated with the ILECs' historical as providers of universal service.<sup>474</sup>

114. ITC states that the difference between the level of costs incurred in a regulated environment and those incurred in a competitive environment would require carriers to clear certain assets from accounts to operate competitively.<sup>475</sup> ITC suggests that the Commission should establish a process by which each ILEC could establish the difference between their costs as stated in their audited financial statements related to their investment accounts and their costs as established pursuant to either a TELRIC study or proxy model reflecting these same accounts and then could recover that difference through the universal service support mechanisms over a

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<sup>469</sup> *Id.* at 7.

<sup>470</sup> U S West comments at 14-15.

<sup>471</sup> U S West reply comments at 2. *See also* Puerto Rico Tel. Co. reply comments at 7 (stating that the Commission in the Local Competition Order indicated that the recovery of embedded costs would be revisited in the Universal Service and access reform proceedings).

<sup>472</sup> GTE comments at 42.

<sup>473</sup> *Id.* at 31.

<sup>474</sup> GTE reply comments at 30.

<sup>475</sup> ITC reply comments at 8.



three-year period. ITC proposes that during this period, the Commission base universal service support on forward-looking costs, in order not to duplicate the recovery of embedded costs. After the three-year period, TELRIC investment costs, based either on each carrier's individual costs or a proxy, should be used for universal service purposes.<sup>476</sup>

115. Several commenters criticize the ILECs' proposals for treating legacy costs.<sup>477</sup> NCTA contends that the ILECs' aggregate cost of providing outside plant may have increased based on their accommodation of the demand for services beyond their universal service obligations. For example, NCTA asserts that the ILECs' facilities have been designed and constructed with far more extensive feeder and distribution capacity than would have been required to meet a "one line per household" service obligation. NCTA further contends that "neither the Act or any 'regulatory compact' ever guaranteed ILECs the unmitigated right to recover 'legacy costs'." NCTA maintains that the only guarantee a provider was given, under any version of a regulatory compact, was the opportunity to recover a reasonable return on investment and that this opportunity was not "intended to be a blank check to indemnify incumbent LECs from the consequences of their management choices."<sup>478</sup> To refute the ILECs' constitutional takings argument, NCTA cites *Illinois Bell Tel. Co. v. FCC*,<sup>479</sup> for the proposition that there is no constitutional right "to include in the rate base all actual costs for investments prudent when made." Thus, NCTA states that the ILECs' takings argument must fail in the absence of a judicial inquiry with respect to specific property, particular estimates of economic impact, and ultimate valuation of an individual ILEC's circumstances.<sup>480</sup>

116. CPI contends that the support mechanism does not have to compensate ILECs fully for their embedded costs, because ILECs incurred such costs in a monopoly market that did not induce efficient operation.<sup>481</sup> CPI also states that the Commission need not review the ILECs' embedded costs, because the Federal universal service fund should not by itself provide all of the support that is required in high cost areas.<sup>482</sup> CPI argues that in establishing the universal service mechanism, the Commission's main purpose is not to keep ILECs whole, but to determine a method to distribute federal universal service support equitably.<sup>483</sup> Ohio PUC agrees, stating that Congress did not intend for the federal universal service mechanism to

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<sup>476</sup> *Id.* at 9.

<sup>477</sup> *See, e.g.*, CPI reply comments at 2; NCTA reply comments at 13; Ohio PUC reply comments at 10-12.

<sup>478</sup> NCTA reply comments at 12.

<sup>479</sup> 988 F.2d 1254, 1263 (D.C. Cir. 1993)

<sup>480</sup> NCTA reply comments at 13.

<sup>481</sup> CPI reply comments at 2.

<sup>482</sup> *Id.* at 3.

<sup>483</sup> *Id.* at 3.

become the sole source of reimbursement for each carrier's embedded costs unrecovered in current rates.<sup>484</sup> CPI further contends that the state regulatory bodies are the appropriate fora in which to raise the issue of legacy costs, because that is where prices are set.<sup>485</sup>

117. Construction Costs. U S West contends that the Commission should assure full recovery of a carrier's cost of constructing facilities to provide universal service at government behest.<sup>486</sup> Thus, U S West proposes that the universal service support mechanism should fund new, high cost construction through an up-front payment to the constructing carrier that covers the difference between the investment actually made by the carrier and the universal service investment component.<sup>487</sup> This amount, the high cost investment differential, would be adjusted if there was a mismatch between the asset life and the payment period. Pursuant to U S West's approach, the carrier might continue to receive universal service payments for operational expenses but would not receive further payments for facility construction.<sup>488</sup> U S West advocates making the ILECs' investment a benchmark that becomes an input to the forward-looking cost calculation.<sup>489</sup> In addition, except upon extraordinary showing, a second carrier would not be able to receive support for construction costs for a duplicative facility.<sup>490</sup> MFS asserts that granting ILECs a guarantee that they will recover their investment would not be competitively neutral, because new entrants are building facilities without such a guarantee.<sup>491</sup>

## **2. Determination of Forward-Looking Economic Cost for Non-Rural Carriers**

118. General. Many commenters support the Joint Board's recommendation to use a proxy model to calculate the cost of providing supported services.<sup>492</sup> ALTS agrees with the Joint Board that a proxy model is the best method to estimate forward-looking costs.<sup>493</sup> LCI states that

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<sup>484</sup> Ohio PUC reply comments at 10.

<sup>485</sup> CPI reply comments at 3.

<sup>486</sup> U S West comments at 9.

<sup>487</sup> *Id.* U S West defines the universal service investment component as "the monthly universal service support amount over the depreciable life of an asset." *Id.*

<sup>488</sup> U S West comments at 11-12.

<sup>489</sup> *Id.* at 13.

<sup>490</sup> *Id.*

<sup>491</sup> MFS reply comments at 8-11.

<sup>492</sup> *See, e.g.,* ITI comments at 2; MFS comments at 20; ACTA reply comments at 5.

<sup>493</sup> ALTS comments at 7.

the use of a forward-looking proxy model is most consistent with the newly competitive local service environment.<sup>494</sup> AirTouch and CompTel concludes that proxy models are competitively neutral, promote efficiency, and are easy to administer.<sup>495</sup> The Maryland PSC supports the use of a proxy model for the Federal universal service mechanism but argues that states must be able to design their own mechanisms by which to determine the amount of state universal service.<sup>496</sup>

119. Some commenters, however, oppose the use of a proxy model to calculate the cost of providing the supported services.<sup>497</sup> Roseville Tel. Co. asserts that the models are technically flawed and that the Commission should abandon them.<sup>498</sup> Western Alliance objecting to the use of proxies, asserts that the proposed models are not sufficiently tested or verifiable at this time.<sup>499</sup> Tularosa Basin Tel. and RT claim that a proxy model should not be used because a proxy model calculation will be outdated as soon as it is released, because of constant changes in technology.<sup>500</sup>

120. Several commenters opposing the use of a proxy model claim that a model cannot assess the true costs of providing service. GTE states that the models use simple rules of thumb and construct a hypothetical network for a static 100 percent demand level service provider in an environment free uncertainty.<sup>501</sup> Several commenters argue that support should be based on the carrier's embedded costs.<sup>502</sup> ITC and SBC contend that because proxy models calculate support based on the costs of a hypothetical network, the costs derived from the proxy model will not be sufficient to support the costs of a real world network, in violation of section 254.<sup>503</sup> Disagreeing, AirTouch and the Ohio PUC state that use of a proxy model will provide sufficient support for carriers.<sup>504</sup>

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<sup>494</sup> LCI comments at 7.

<sup>495</sup> AirTouch comments at 23; CompTel comments at 10.

<sup>496</sup> Maryland PSC comments at 7.

<sup>497</sup> *See, e.g.*, Ameritech comments at 11; CNMI comments at 38; CWA reply comments at 14.

<sup>498</sup> Roseville Tel Co. comments at 2, 10.

<sup>499</sup> Western Alliance comments at 32-33.

<sup>500</sup> RT comments at 2-3; Tularosa Basin Tel. comments at 5.

<sup>501</sup> GTE model reply comments at 9.

<sup>502</sup> *See, e.g.*, GSA comments at 5; Minnesota Coalition comments at 18; USTA comments at 12.

<sup>503</sup> ITC reply comments at 5; SBC reply comments at 11.

<sup>504</sup> AirTouch comments at 23; Ohio PUC reply comments at 9.

121. Some commenters suggest that while a proxy model should not be used to determine the amount of support that a carrier receives, it could be used to identify high cost areas.<sup>505</sup> GTE and PacTel suggest that a proxy model be used to apportion embedded costs to geographic areas smaller than the current study areas. They contend that this approach satisfies the need to provide sufficient support and target that support to high cost areas that cannot be identified through ILEC cost records because there are no cost figures for small geographic areas such as CBGs or census blocks.<sup>506</sup> GSA agrees that proxy models could be used when carrier's embedded costs cannot be determined for a particular geographic area.<sup>507</sup>

122. Criteria for Evaluation. Several commenters support the eight criteria for evaluating proxy models set forth by the Joint Board.<sup>508</sup> Other commenters, however, suggest changes or additions to the criteria. ALTS suggests that the fifth criterion, which concerns the estimation of costs for all subscribers in a geographic area,<sup>509</sup> should include the principle that "any model must reflect only the costs associated with the revenues against which they will be measured."<sup>510</sup> MFS and Washington UTC suggest adding a criterion that the economic costs estimated by the model should not exceed the embedded costs of the ILEC serving that area.<sup>511</sup> MFS and RTC also recommend adding that the model must reflect realistic engineering practices.<sup>512</sup>

123. PacTel and RTC/GVNW assert that a model's assumption must be internally consistent. They contend that because they purport to calculate the forward-looking costs of a new entrant, the proxy models must use forward-looking assumptions regarding such cost factors as a carrier's market share, cost of capital, debt-to-equity ratio, and depreciation lives.<sup>513</sup> PacTel contends that the currently filed proxy models violate the consistency requirement because they assume 100 percent market share for the carrier being modelled and use inputs for cost of capital, fill factors, debt-to-equity ratios, and depreciation lives of a carrier with 100 percent of

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<sup>505</sup> See TCA comments at 5; USTA comments at 12.

<sup>506</sup> GTE comments at 57; PacTel reply comments at 6.

<sup>507</sup> GSA comments at 7.

<sup>508</sup> See, e.g., Ad Hoc comments at 6; GSA comments at 6; Sprint comments at 5.

<sup>509</sup> See Recommended Decision, 12 FCC Rcd at 233.

<sup>510</sup> ALTS comments at 8.

<sup>511</sup> MFA comments at 20-21; Washington UTC comments at 4.

<sup>512</sup> MFS comments at 23; RTC comments at 6.

<sup>513</sup> PacTel post-workshop comments at 3; RTC/GVNW post-workshop comments at 12.

the market rather than of one in a competitive market.<sup>514</sup> RTC/GVNW also state that market share is necessary input to a model.<sup>515</sup>

124. Several commenters state that the criteria should include some requirement for validation or verification of the results of the model.<sup>516</sup> SBC suggests adding as a criterion that "the model should be able to replicate the costs experienced by incumbent LECs if the input variables reflect the equivalent values of those LECs."<sup>517</sup> SBC contends that unless the proxy model closely replicates the actual cost of providing the supported services, the model's use will not result in predictable or sufficient support, as required by section 254.<sup>518</sup> GTE states that a model's accuracy can only be verified by comparing its output to existing embedded cost information.<sup>519</sup> PacTel contends that in order to comply with section 254, a proxy model must: (1) allow ILECs to recover their legacy costs; (2) predict forward-looking costs based on actual ILEC cost information; (3) use consistent cost and demand figures; (4) include joint and common costs; and (5) be auditable, verifiable, and include mutable data inputs for relevant variables.<sup>520</sup> MFS, on the other hand, contends that the embedded costs of the ILEC should not be used to validate the results of the proxy models because those costs include of the ILEC's inefficiencies and are not the costs of an efficient, new entrant.<sup>521</sup>

125. AT&T/MCI suggest that of the possible methods of verification, a comparison of model results to an engineering study of existing networks holds the most promise. According to AT&T/MCI, verification would consist of having an engineer review a selected sample of CBGs to check that current best engineering practices were used to design the network.<sup>522</sup> RTC/GVNW agrees that any validation must begin at the physical-facilities level, with actual engineering studies.<sup>523</sup> GTE and Sprint also agree that independent engineering consultants

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<sup>514</sup> PacTel post-workshop comments at 3.

<sup>515</sup> RTC/GVNW post-workshop comments at 4, 7.

<sup>516</sup> *See, e.g.*, GTE comments at 28; RTC comments at 4; TDS Telecom comments at 21.

<sup>517</sup> SBC comments at 28-29.

<sup>518</sup> *Id.* at 29.

<sup>519</sup> GTE reply comments at 26.

<sup>520</sup> PacTel comments at 6.

<sup>521</sup> MFS model comments at 21-22.

<sup>522</sup> AT&T/MCI model comments at 10.

<sup>523</sup> RTC/GVNW post-workshop comments at 14.

should be used to verify the models' engineering assumptions.<sup>524</sup>

126. Proposed Models: General. Three models were submitted to the Commission for consideration in this proceeding. The Benchmark Cost Proxy Model was submitted by Sprint, PacTel, and U S West.<sup>525</sup> The Hatfield Model 3.1 was developed by Hatfield Associates, Inc. under the sponsorship of AT&T and MCI.<sup>526</sup> The New Jersey Advocate submitted the Telecom Economic Cost Model (TECM), which was developed by Ben Johnson Associates, Inc. (Ben Johnson).<sup>527</sup>

127. BANX notes that the Hatfield and the BCM2/BCPM models produce dramatically different results, even though they supposedly are modeling the same network and the same geographic level, and thus questions the use of either model for calculating the costs of the supported services.<sup>528</sup> Ameritech agrees, arguing that the current models are flawed, untested, and produce conflicting and unreliable results.<sup>529</sup> Many other commenters contend, however, that the key difference between the models is the inputs used by the models' proponents.<sup>530</sup>

128. NCTA and Teleport assert that the Hatfield and BCPM models do not fully reflect the economies of scale enjoyed by an ILEC. NCTA asserts that the appropriate method for recognizing economies of scale is to take into account the difference between the stand-alone costs of a network constructed for just the supported services and the stand-alone cost of a network constructed for all services.<sup>531</sup> Similarly, Teleport contends that the Hatfield and BCPM models do not adhere to the principle of TSLRIC, because they do not estimate the costs that would be avoided if a provider stopped offering basic service yet continued to offer all its other services.<sup>532</sup>

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<sup>524</sup> GTE model comments at 36; Sprint model comments at 8.

<sup>525</sup> Letter from Alan Ciamporcero, Pacific Telesis, Warren Hannah, Sprint, and Glenn Brown, U S West, to Office of the Secretary, FCC, dated Jan. 31, 1997 (BCPM Jan. 31 Submission).

<sup>526</sup> There have been several different versions of the Hatfield model. *See* Letter from Richard N. Clarke, AT&T, to William F. Caton, FCC, dated Feb. 28, 1997 (Hatfield Feb 28 Submission), att. at 5-7.

<sup>527</sup> Letter from Jonathan Askin, Division of the Ratepayer Advocate, State of New Jersey, to Office of the Secretary, FCC, dated Jan. 6, 1997 (TECM Jan. 6 Submission).

<sup>528</sup> BANX reply comments at 12-13.

<sup>529</sup> Ameritech model comments at 1.

<sup>530</sup> *See, e.g.* ALTS post-workshop comments at 3; Aliant model comments at 2.

<sup>531</sup> NCTA pre-workshop comments at 4-5.

<sup>532</sup> Teleport comments at 5-6.

129. PacTel contends that if the Hatfield and the BCPM use forward-looking costs, they should also use forward-looking demand.<sup>533</sup> NCTA agrees, stating that the use of cost factors that are derived from historical information, such as ARMIS data, violates the principles of a forward-looking cost model.<sup>534</sup> PacTel claims that while the models currently calculate costs for a carrier with 100 per cent market share, ILECs will lose market share, and therefore their forward-looking unit cost will be higher than contemplated by the models.<sup>535</sup> MCI disagrees, arguing that if the new entrants use the ILEC's unbundled network elements to provide support, the ILEC will not actually have any decline in the use of its network and the unbundled network element prices will cover the TELRIC of the loop. MCI also contends that PacTel's argument ignores market growth, and that even if an ILEC loses customers it may still see increased minutes of use of its network.<sup>536</sup>

130. Most commenters agree that the smaller the geographic unit used by the model the more precise will be the cost estimates it generates. GTE contends that study areas, density zones, exchanges and wire centers are simply too large because of the potentially significant variation in the costs of serving different customers in those areas.<sup>537</sup> Some commenters assert that the CBG should be the geographic unit of analysis for the models.<sup>538</sup> Other commenters, however, argue that smaller areas, such as census blocks (CBs) or grid cells,<sup>539</sup> should be used, particularly in rural areas with very low population densities.<sup>540</sup> AT&T/MCI, while agreeing that the use of smaller areas can lead to more detailed cost estimates, warn that use of such areas makes the model more complex and requires more powerful computers, and may lead to a false sense of precision.<sup>541</sup>

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<sup>533</sup> PacTel comments at 14.

<sup>534</sup> NCTA pre-workshop comments at 5.

<sup>535</sup> PacTel comments at 14.

<sup>536</sup> MCI reply comments at 4.

<sup>537</sup> GTE model comments at 43.

<sup>538</sup> See Sprint model comments at 12; Texas PUC model comments at 6.

<sup>539</sup> The Bureau of the Census defines "census blocks" as "small areas bounded on all sides by visible features such as street, roads, streams, and railroad tracks, and by invisible boundaries such as city, town, township, and county limits, property lines, and short, imaginary extensions of streets and roads." Bureau of the Census, United States Department of Commerce, 1990 Census of population and Housing, A-3. It further defines a "census block group" as "generally contain[ing] between 250 and 550 housing units, with the ideal size being 400 housing units." *Id.* at A-4. A "grid cell" is an approximately four-tenths of a square mile (3,000 ft by 3,000 ft). See Recommended Decision, 12 FCC Rcd at 222.

<sup>540</sup> See, e.g., BellSouth model comments, att. at 1; RTC model comments at 10; USTA model comments at 20.

<sup>541</sup> AT&T/MCI model comments at 12-13.

131. According to the commenters, a major problem with the way the models work is that they presume an even distribution of households across the geographic unit.<sup>542</sup> BANX states that while a model's assumption that households are evenly distributed throughout a CBG may be reasonable for some parts of the country, it is not descriptive of areas in the Northeast and Mid-Atlantic. BANX claims that in those areas of the nation, the CBG is shaped irregularly, with many customers clustered relatively close to the central office, while other are far away. Thus, according to BANX, averaging costs by CBGs does not accurately group customers for which the cost of service is high or low.<sup>543</sup>

132. Commenters also complain that the models do not reflect the true line counts within a CBG or for a particular wire center.<sup>544</sup> GTE notes that the models use the number of households in each CBG to determine residence line counts. It argues that this approach ignores differing penetration levels among CBGs.<sup>545</sup> SBC states that when it compared the lines counts for its operations in Texas to the counts in the models, it found the models' estimated line count was different by more than 10 percent for almost one-half of its approximately 500 wire centers in Texas.<sup>546</sup> GTE and Sprint note that the ILECs have line counts for each wire center, and Sprint urges the Commission to obtain those data through an information request to the ILECs.<sup>547</sup>

133. The commenters all note that the model proponents are having difficulty acquiring accurate inputs for switch costs because of the lack of public information on switch costs.<sup>548</sup> Aliant and Sprint suggest that the Commission should also send a data request to ILECs and switch vendors to obtain accurate switch costs information.<sup>549</sup> BellSouth and GTE recommend using the Bellcore Switch Cost Information System (SCIS) to obtain switch cost information for use in the models.<sup>550</sup>

134. Some commenters, including the ILECs, contend that the models should use inputs for such factors as cost of capital and debt-to-equity ratios that reflect a competitive

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<sup>542</sup> See Aliant model comments at 3; RTC model comments at 10.

<sup>543</sup> BANX model comments at 12-13.

<sup>544</sup> See, e.g., Ameritech model comments at 19.

<sup>545</sup> GTE model comments at 45.

<sup>546</sup> SBC model comments at 20.

<sup>547</sup> GTE model comments at 46; Sprint model comments at 13.

<sup>548</sup> See, e.g., AT&T/MCI model comments at 19; NCTA reply comments at 41;

<sup>549</sup> Aliant model comments at 6; Sprint model comments at 9.

<sup>550</sup> BellSouth model comments, att. 1 at 3; GTE model comments at 84.



market, and not the historical rates for ILECs.<sup>551</sup> ALTS contends that the models should not use the cost of capital of an average new entrant because the ILECs face less risk than a new entrant.<sup>552</sup> NCTA asserts that the competition posed by resellers presents no risk to the ILEC's recovery of their capital.<sup>553</sup>

135. Commenters also disagree on the depreciation rates used as model inputs. BANX states that proxy model advocates cannot "have it both ways," by basing costs on an ideal competitive network, while basing depreciation on a method that makes sense only for a rate-of-return regulated monopoly. BANX asserts that the models must employ accelerated depreciation methods.<sup>554</sup> Other commenters agree that depreciation factors used by competitive firms should be used in the models.<sup>555</sup>

136. Some commenters note that the proposed models do not include wireless technologies. APC argues that the proposed models are flawed because they do not include wireless alternatives.<sup>556</sup> CTIA and Nortel agree, contending that the proposed proxy models therefore are not competitively neutral.<sup>557</sup> APC and CTIA claim that the failure to acknowledge that wireless technologies may be less expensive in some circumstances will lead to an artificially inflated fund and, in consequence, higher assessments for contributing carriers.<sup>558</sup>

137. BCPM: Description of the Model. According to this model's proponents, the BCPM is a combination of, and improvement to, the best attributes of the BCM2 and CPM.<sup>559</sup> The proponents state that the BCPM differs from the BCM2 in two major ways.<sup>560</sup> First, the BCPM inputs are different from those of the BCM2. Second, the structure of the model has been changed to provide more clarity to the user concerning the use of input areas and the

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<sup>551</sup> See, e.g., Aliant model comments at 7; RTC model comments at 14; USTA model comments at 21.

<sup>552</sup> ALTS post-workshop comments at 2.

<sup>553</sup> NCTA model reply comments at 13.

<sup>554</sup> BANX model comments at 11.

<sup>555</sup> See, e.g., Aliant model comments at 7; MFS model comments at 30; GTE model reply comments at 17.

<sup>556</sup> APC reply comments 3.

<sup>557</sup> CTIA comments at 6; Nortel comments at 5.

<sup>558</sup> CTIA comments at 7; APC reply comments at 3.

<sup>559</sup> BCPM Jan. 31 Submission at 2. Because it became a joint sponsor of the BCPM, PacTel did not submit the CPM for our consideration in this proceeding. See Letter from Alan F. Ciamporcero, Pacific Telesis, to John S. Morabito, FCC, dated Jan. 7, 1997.

<sup>560</sup> For a discussion of the BCM2, its predecessor, the BCM, and the CPM, see Recommended Decision, 12 FCC Rcd at 217-225.

purpose of calculations.<sup>561</sup>

138. According to its proponents, the BCPM is a geographically-based high level engineering model of a hypothetical local network that can be used to estimate benchmark costs for providing residential and business basic telephone service in small geographic areas. Small areas are used because the cost of service varies greatly even within the geographic area served by a single wire center. The BCPM assumes that all plant is installed at a single point in time throughout the nation.<sup>562</sup> The model assumes the existing central office locations and boundaries throughout the county. Those data are entered into a geographic information system that associates each CBG is associated with its central office based on the centroid of the CBG. That information, plus the relative physical locations of households and central offices and CBG information are entered into the model. With this information, the BCPM designs a local exchange network using a tree and branch topology.<sup>563</sup>

139. The proponents state that the BCPM designs a voice grade network using state-of-the-art currently available technology. The model's default values and parameters define a network capable of providing basic single-party voice grade service that allows customers to use currently available data modems for dial-up access to information services. The BCPM designs the network to eliminate problems associated with providing voice grade service over loaded loop plant.<sup>564</sup>

140. The BCPM has three modules: (1) the investment module, used to calculate network investments; (2) the capital cost module, used to calculate capital cost factors and expenses; and (3) the reports module, which produces reports on either a CBG, CLLI,<sup>565</sup> state or company basis.<sup>566</sup> The investment module determines the investment required for the network. The module develops investment costs for the feeder and distribution by modeling a network based on the location of customers, as determined through CBG data, and the location of serving wire centers. As does the BCM2, BCPM assumes that households within a CBG are uniformly distributed. In rural areas, the modelled size of the CBG is reduced to reflect the removal of areas that do not have road access, based on the assumption that households are located within

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<sup>561</sup> BCPM Jan. 31 Submission, att. 9 at 114.

<sup>562</sup> *Id.* at 108.

<sup>563</sup> *Id.* at 109.

<sup>564</sup> *Id.* at 111. A loaded loop is one equipped with loading coils to add induction in order to minimize amplitude distortion. A loading coil is an induction device generally used with loops longer than 18,000 feet, that compensates for wire capacitance and boosts voice grade frequencies. *See* Newton's Telecom Dictionary (7th ed. 1994) at 611-12.

<sup>565</sup> CLLI refers to a system of codes used by Bellcore to identify the location of telephone facilities and equipment.

<sup>566</sup> BCPM Jan. 31 Submission, att. 9 at 112-13.

500 feet of a road.<sup>567</sup> Costs incurred for distribution plant include the cost of the cable itself, as well as its installation and structure, and of the network interface device (NID), drop wire, drop terminal, splicing, and engineering.<sup>568</sup> Rather than the six zones used in the BCM2, the BCPM uses seven different density groups to determine for a given CBG the mixture of aerial, buried, and underground plant, feeder fill factors, distribution fill factors, and the mix of activities in placing plant, such as aerial placement or burying, and the cost per foot to install plant.<sup>569</sup> In order to provide adequate transmission capabilities for fax and dial-up modems, the model sets maximum loop lengths for copper at 12,000 feet for both feeder and distribution, which eliminates the need for loading coils.<sup>570</sup> The model uses only digital switching technology, and the cost entries are based on results from a data request that the proponents sent to ILECs.<sup>571</sup>

141. After the model defines the investment required for the network, the capital costs and expenses are calculated using the capital cost module. The BCPM has been designed to allow inputs for depreciation, cost of capital, and tax rates for nineteen different plant accounts, including motor vehicle, furniture, land, building, poles, and conduit. The estimates of plant lives are used to develop the depreciation rates. The lives, salvage, and costs of removal are based upon a ILEC industry data survey requesting forward-looking values. The module also incorporates the separate cost of debt and equity rates, along with the debt-to-equity ratio. Once the annual capital cost factors are developed, they are multiplied by the investment to arrive at yearly capital costs.<sup>572</sup> The operating expenses are expressed as an expense per line, based on ILEC estimates of forward-looking expenses per line for each Class A expense account.<sup>573</sup>

142. The BCPM's proponents state that the model includes many changes from the BCM2 and CPM.<sup>574</sup> For instance, the BCPM associates customers with the serving wire center for the centroid of the CBG, rather than with their closest wire center. The density zone classifications from the CPM are used in the BCPM, because they are more evenly distributed and more closely matched to currently available sizes for plant, such as cable sizes, than those

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<sup>567</sup> *Id.* at 117.

<sup>568</sup> *Id.* at 119.

<sup>569</sup> *Id.* at 120.

<sup>570</sup> *Id.* at 111-12.

<sup>571</sup> *Id.* at 121.

<sup>572</sup> BCPM Jan. 31 Submission, att. 9 at 132-33.

<sup>573</sup> *Id.* at 133. The term Class A expense accounts refers to the expense accounts of Class A companies, those companies with annual revenues from regulated telecommunications that are equal to or above the indexed revenue threshold. *See* 47 C.F.R. §§ 32.11(a)(1), 32.11(b), 32.5999(h).

<sup>574</sup> The BCM2, its predecessor the BCM, and CPM are discussed in the Recommended Decision, 12 FCC Rcd at 217-25.

used in BCM2.<sup>575</sup> Moreover, the BCPM expands the number of accounts with annual charge factors so that there is now a separate annual charge factor for each of the applicable USOA plant accounts.<sup>576</sup> The BCPM now allows for the sharing of various structures, such as poles and conduits, and sharing percentages are established by density zone.<sup>577</sup> The BCPM uses actual data the proponents requested from the ILECs and thus reflect current ILEC purchases of central office plant and outside plant, cable, and equipment.<sup>578</sup> For example, the costs of a switch used in the model are derived from a switch cost curve that the proponents developed based on the data that they collected from various ILECs.<sup>579</sup>

143. Sprint states that the 11.4 percent cost of capital, the default value for this parameter, represents the cost incurred by an efficient entrant offering basic service in a competitive market environment. In addition, Sprint states that the 11.4 percent cost of capital is a conservative compromise between the Commission approved 11.25 percent and the estimated figure of 11.8 percent by Dr. James Vander Weide of Duke University.<sup>580</sup>

144. Comments on the BCPM. The Ohio PUC notes that it has selected the BCM and any subsequent revisions, such as the BCPM, to calculate of the costs for determining high cost support for its state universal service mechanism. The Ohio PUC believes that the BCM2 meets the criteria set forth by the Joint Board more fully than the Hatfield 2.2.2.<sup>581</sup> RUS states that the network modeled by BCPM has the architecture on which RUS loans are based in rural areas, and RUS considers that architecture to be efficient and capable of providing the supported services.<sup>582</sup>

145. RUS asserts that BCPM's assumption that all households are within 500 feet on a road is not true in many rural areas.<sup>583</sup> RUS also states that in analyzing the model, it found that the more new plant that is incorporated in a carrier's network at one time, the more that BCM2's cost estimates fell below the RUS estimated cost. It found that while there is a high correlation between BCM2 and RUS estimates of total plant in service (TPIS) for projects that added new

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<sup>575</sup> BCPM Jan. 31 Submission at 3.

<sup>576</sup> *Id.* at 4. See 47 C.F.R. §§ 32.2000 *et seq.*

<sup>577</sup> *Id.* at 5.

<sup>578</sup> *Id.* at 9.

<sup>579</sup> *Id.* at 5.

<sup>580</sup> Sprint model comments at 18.

<sup>581</sup> Ohio PUC comments at 7.

<sup>582</sup> RUS model reply comments at 2-3.

<sup>583</sup> RUS model reply comments at 3.

facilities comprising less than thirty percent of the amount of pre-existing facilities, there is a much lower correlation for projects with over a 100 percent increase in TPIS.<sup>584</sup> According to RUS, this suggests that BCM2 more accurately estimates the costs for areas that need little upgrade to provide the supported services than it does for areas that need more investment.<sup>585</sup>

146. Nortel challenges the principle that the BCPM proponents used to cap line costs at \$10,000.00 per line.<sup>586</sup> The cap level rests on the assumption that above that level wireless technologies would be used,<sup>587</sup> which Nortel asserts does not accurately represent the costs of wireless loops. Nortel claims that recent deployments of fixed wireless access systems show declining costs for wireless loops.<sup>588</sup> Stating that most of the carriers that borrow from it have some loops that cost over \$10,000.00 and that it has found only a few instances where wireless loop plant is cheaper than wireline, RUS asserts, however, that the \$10,000.00 cap is unrealistic.<sup>589</sup> RUS claims that the most expensive loops are usually so far apart that multiple wireless systems would be required with each serving only a few subscribers, making them economically impractical.<sup>590</sup> Asserting that the cost of wireless loops may be greater than the \$10,000.00 cap used by BCPM, AT&T/MCI state that use of this cap may underestimate the cost of some loops.<sup>591</sup>

147. Hatfield: Description of the Model. According to its proponents, Hatfield 3.1 is capable of estimating the forward-looking economic costs of (1) UNEs, based on TELRIC principles; (2) basic telephone service, as defined by the Joint Board in the Recommended Decision; and (3) carrier access to, and interconnection with, the local exchange network.<sup>592</sup>

148. Its proponents state that Hatfield 3.1 constructs a "bottom up" estimate of costs based on detailed information concerning customer demand, network component prices,

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<sup>584</sup> RUS model comments at 5. RUS explains that it compared BCM2 cost estimates with data on 99 RUS loans made in the past two years. *Id.*

<sup>585</sup> *Id.*

<sup>586</sup> Nortel comments at 5.

<sup>587</sup> The BCPM use a cap of \$10,000.00 of investment per loop as an estimate of when it is economical to replace wireline loops with wireless. *See* Sprint model comments at 12. The BCPM produces reports that show the cost per line when the cap is used, and when the costs of loops in excess of \$10,000.00 is used.

<sup>588</sup> Nortel comments at 5.

<sup>589</sup> RUS model reply comments at 3.

<sup>590</sup> RUS model comments at 4.

<sup>591</sup> AT&T/MCI model comments at 13.

<sup>592</sup> Hatfield Feb. 28 Submission at 4.

operational costs, network operations criteria, and other factors affecting the costs of providing local service. Hatfield 3.1, according to its proponents, builds an engineering model of a local exchange network with sufficient capacity to meet total demand and to maintain a high level of service quality.<sup>593</sup>

149. Hatfield 3.1 contains four modules: (1) the distribution module, which calculates distribution distances and investment; (2) the feeder module, which calculates feeder distances and investment; (3) the switching and interoffice module, which calculates switching, signaling, and interoffice investment; and (4) the expense module, which calculates the cost of capital, expenses, UNE unit costs, universal service requirements, and access costs.<sup>594</sup> The inputs for the model are contained in work files and include: (1) demographic, geographic, and geological characteristics of CBGs, which are used to locate geographically the number of customers requiring service, the wire center that serves them, and the types of terrain within the CBG; (2) interoffice distances between end office, tandems, and signaling transfer points (STPs), used in estimating route miles required for interoffice transmission facilities; (3) 1995 ARMIS data reported by LECs, which provide investment, traffic, and expense information; and, (4) adjustable inputs that allow the user to set carrier or location specific parameters, such as labor costs.<sup>595</sup> The inputs include the prices of various network components, with the associated installation and placement costs, as well as various capital cost parameters.<sup>596</sup>

150. The distribution module configures the portion of the network from the serving area interfaces (SAIs) to the customer's premises. The module determines the lengths and diameters of distribution cable, the associated structures, such as poles and trenching, and the number of terminals, splices, drops, and NIDs required to provide service in the CBG. The selection of whether to serve the CBG using copper wires or fiber optic cable is made according to an adjustable parameter that specifies the maximum feeder distance to the CBG beyond which fiber is to be installed.<sup>597</sup> The default setting is at 9,000 feet.<sup>598</sup> Once the module has determined the distribution elements required, it calculates the investment costs associated with those elements, using as inputs the price for each such element.<sup>599</sup>

151. The feeder module configures the portion of the network from the wire center to

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<sup>593</sup> *Id.* at 4.

<sup>594</sup> *See id.* at 18.

<sup>595</sup> *Id.* at 18-19.

<sup>596</sup> *Id.* at 4.

<sup>597</sup> Hatfield Feb. 28 Submission at 19.

<sup>598</sup> *See id.* at 35.

<sup>599</sup> *Id.* at 19.

the SAIs. The feeder module uses the information from the distribution module to determine the size and type of cable required to reach the SAIs located in each CBG and also of supporting structures, such as poles, conduit, and manholes. The feeder module then calculates the investment costs associated with those elements using the price of each such element.<sup>600</sup>

152. The switching and interoffice module computes investment costs required for end-office switching, tandem switching, signaling, and interoffice transmission facilities. It determines the required line, traffic, and call processing capacity of switches based on line totals by customer type for the serving wire center, and based on ARMIS-derived traffic and calling volume inputs. The switching and interoffice module also determines capacity and distances of interoffice transmission facilities required to provide interoffice transport.<sup>601</sup>

153. The expense module uses the network investment information generated by the other modules to calculate the monthly costs for universal service, UNEs, and carrier access, including capital costs associated with the investments, such as depreciation, and the costs of operating the network, including maintenance, network operations, and general support expenses. Information on network operating and maintenance expenses is derived from ARMIS and other sources. The expense module produces reports showing the key outputs of the model, including the cost of providing universal service. While the outputs are based on investments calculated at the CBG level, the results may be displayed by individual wire center or by CBG.<sup>602</sup>

154. The model's proponents state that Hatfield 3.1 contains a number of significant changes from Hatfield 2.2.2.<sup>603</sup> Among those changes, the number of density zones was increased from six to nine.<sup>604</sup> Moreover, each CBG is now assigned to a wire center based on an analysis of the NPA-NXXs serving the CBG.<sup>605</sup> Estimates of the number of residence and business lines per CBG have been improved by, for example, accounting for differences in the demand for residence lines based on the age-income profile of the CBG.<sup>606</sup> According to the model's proponents, the switching system model is more sophisticated than that used in Hatfield

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<sup>600</sup> *Id.*

<sup>601</sup> *Id.* at 20.

<sup>602</sup> BCPM Feb. 28 Submission at 20.

<sup>603</sup> *Id.* at 8. For a discussion of the Hatfield 2.2.2, *see* Recommended Decision, 12 FCC Rcd at 225-29.

<sup>604</sup> The highest density zone in Hatfield 2.2.2 -- greater than 2,500 lines per square mile -- has been broken into three zones for Hatfield 3.1 -- 2,550-5,000, 5,001-10,000, and more than 10,000 lines per square mile -- to better differentiate dense suburban from dense downtown areas. The second lowest density zone in Hatfield 2.2.2, 5-200 lines per square mile, was divided into two zones, 5-100 and 101-200 lines per square mile, to provide more fine-grained distinctions within low density areas. Hatfield Feb. 28 Submission at 8.

<sup>605</sup> NPA-NXX is a designation for the area code (NPA) and central office (NXX) numbers.

<sup>606</sup> *Id.* at 8.

2.2.2 and now treats BOCs and large ILECs separately from rural ILECs. Depreciation expense calculation has been changed to reflect the use of investment levels at mid-year, rather than at the end of the year, and to adjust for net salvage value.<sup>607</sup>

155. According to the proponents, Hatfield assigns joint and common costs by adding 10.4 percent to all other expenses. This mechanism is intended to capture only corporate operations expenses, and is based on an econometric study of the relationship of joint and common costs and direct expenses. Hatfield also includes general support expenses, billing, bill inquiry, and white pages listings. Its proponents argue that this approach assigns a reasonable level of overhead expenses to universal service.<sup>608</sup>

156. Comments on the Hatfield Model. Several parties endorse the use of the Hatfield model.<sup>609</sup> Other commenters, however, including most ILECs, oppose the Hatfield model.<sup>610</sup> Some commenters claim that the model is biased to produce low costs because the model's proponents would benefit from a smaller universal service surcharge and lower interconnection rates.<sup>611</sup> GTE notes that several state commissions have rejected the Hatfield model and claims that no state commission has embraced or approved the underlying theory, design, or assumptions of the model.<sup>612</sup>

157. GTE asserts that the Commission cannot adopt the Hatfield model, because the proponents have not adequately documented the basis for choosing the default inputs and assumptions.<sup>613</sup> RTC/GVNW asserts that the Hatfield model is internally inconsistent because it uses ILEC embedded cost of capital and depreciation, but does not use embedded cost data.<sup>614</sup> BANX, SBC, and USTA contend that many of the flaws in Hatfield 2.2.2 remain on Hatfield 3.0, including (1) unreasonably long, Commission-prescribed depreciation lives that are unrealistic in a competitive environment; (2) a lower cost of capital than the Commission prescribed in a monopoly environment; (3) expenses based on historical ARMIS expense/investment ratios applied to downward-adjusted investment levels; and (4) a network design based on the economies of scale of a monopoly provider with only new facilities

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<sup>607</sup> *Id.* at 9.

<sup>608</sup> AT&T/MCI model comments at 24.

<sup>609</sup> *See, e.g.*, ALTS comments at 7; LCI comments at 8; ACTA reply comments at 5.

<sup>610</sup> *See, e.g.*, SBC comments at 28; RTC reply comments at 6.

<sup>611</sup> *See, e.g.*, U S West reply comments at 14; BANX model comments at 8 SBC model reply comments at 6.

<sup>612</sup> GTE comments, att. 2 at 5-6.

<sup>613</sup> GTE model reply comments at 21.

<sup>614</sup> RTC/GVNW post-workshop comments at 18.



perfectly sized to current demand.<sup>615</sup> BANX argues that these flaws ensure that the costs calculated by the Hatfield model are far below the costs that either the ILEC or a new entrant would incur to provide telephone service.<sup>616</sup>

158. RUS states that the Hatfield model loop plant with loaded coils. RUS asserts that ILECs are phasing out such loops and that no new entrant would build outside plant based on that antiquated technology. RUS also state that its loans require non-loaded loops, and claims that loaded loops cannot support the bandwidth for voice grade service recommended by the Joint Board.<sup>617</sup>

159. Many commenters disagree with the structure sharing assumptions in the Hatfield model.<sup>618</sup> Aliant states that in rural areas there will be minimal sharing, due to the distinct design parameters and cost associated with facility placement for each type of utility.<sup>619</sup> RTC/GVNW contend that in rural areas carriers often cannot share structures, because there are no cable companies and the electric company often uses a different construction method than the phone company.<sup>620</sup> GTE agrees that there is limited sharing. GTE states that it pays 97.5 percent of the cost for buried plant its uses, in other words, other utilities only cover about 2.5 percent of those costs. For under ground plant GTE pays 95-99 percent, and 57-61 percent for aerial plant.<sup>621</sup> Gabel suggests that for buried cable close to 100 percent of costs should be assigned to telephone, rather than the 33 percent used in the Hatfield model.<sup>622</sup>

160. The model's proponents claim that in many cases criticism of the Hatfield model is misplaced, because that criticism actually relates to the default inputs used in the model. The proponents argue that because the user can adjust the inputs disagreements about the accuracy of the default inputs are no reason to discard the model.<sup>623</sup>

161. TECM: Description of the Model. The New Jersey Advocate, who submitted the

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<sup>615</sup> BANX model reply comments at 4; SBC model reply comments at 6-7; USTA model reply comments at 8.

<sup>616</sup> BANX model reply comments at 4.

<sup>617</sup> RUS model reply comments at 4.

<sup>618</sup> See, e.g., NCTA pre-workshop comments at 3; BellSouth model comments, att. 1 at 3; SBC model comments at 23.

<sup>619</sup> Aliant model comments at 6.

<sup>620</sup> RTC/GVNW post-workshop comments at 19.

<sup>621</sup> GTE model comments at 72.

<sup>622</sup> Gabel model comments at 22.

<sup>623</sup> MCI reply comments at 8.

TECM, used that model in a regulatory proceeding in New Jersey in which the BCM2 and Hatfield 2.2.2 were also under consideration.<sup>624</sup> The TECM has also been filed in intrastate regulatory proceedings in Colorado, Idaho, Mississippi, North Carolina, and Pennsylvania.<sup>625</sup>

162. According to its developer, Ben Johnson, the TECM estimates the cost of local telephone networks. It can be used to estimate the costs services such as local exchange and UNEs. The model can calculate different economic measures of cost, including: (1) long-run average cost, (2) TSLRIC, (3) TELRIC, (4) long-run marginal cost of a service, and (5) long-run marginal costs of an UNE. The TECM can analyze and compare costs under both monopoly conditions and competitive market conditions.<sup>626</sup> The model develops costs at the wire center level, although those costs can be aggregated to the study area or state level.<sup>627</sup> The TECM is usually run using the loop length data of existing wire centers; thus it is a "scorched node" model.<sup>628</sup> The user can modify numerous input values and assumptions, such as debt-to-equity ratios, economic lives, and facility utilization and sharing factors.<sup>629</sup> The model will also develop stand-alone costs of service to different market segments, such as residential and business customers.<sup>630</sup>

163. Subsequent to the staff workshops on proxy models, the New Jersey Advocate submitted a revised version of the TECM in response to comments made by the workshop participants.<sup>631</sup> The changes to the model include modifications to several financial and technical assumptions. For example, new input cells were added for the loaded labor cost per hour section. These new cells allow the user to specify the additional cost of special equipment needed to perform such tasks as pole installation, trenching, and manhole installation.<sup>632</sup> The user can now specify different utilization factors for feeder, feeder/distribution, and distribution

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<sup>624</sup> New Jersey Advocate pre-workshop comments at 1.

<sup>625</sup> *Id.* at 3.

<sup>626</sup> See Ben Johnson Associates, Inc, Telecom Economic Cost Model, User Documentation (Jan. 7, 1997) at 1. (Ben Johnson Jan. 7 User Documentation)

<sup>627</sup> *Id.* at 4-5.

<sup>628</sup> *Id.* at 2. A "scorched node" model is one that models the network using the existing wire centers. A "greenfield" model, by contrast, does not use the existing wire centers, but models a completely new network, including new wire centers.

<sup>629</sup> Ben Johnson Jan. 7 User Documentation at 4.

<sup>630</sup> *Id.* at 8.

<sup>631</sup> Comments of the New Jersey Division of the Ratepayer Advocate Concerning Improvements to the Telecom Economic Cost Model (filed Jan. 31, 1997) (New Jersey Advocate Jan. 31 *ex parte*) at 1.

<sup>632</sup> *Id.* at 2.

cable.<sup>633</sup> In addition, some of the default values were modified. For example, the economic life of switching was reduced to 12 years.<sup>634</sup>

164. Comments on the TECM. The New Jersey Advocate claims that the TECM offers some important advantages over the BCM2/BCPM and Hatfield models. According to the New Jersey Advocate, with the TECM, unlike the BCPM and Hatfield models, the user can easily develop cost estimates covering a wide range of different scenarios to reflect differences in the customer characteristics, network configurations, market shares, and whether the carrier is serving areas close to or distant from the wire center.<sup>635</sup> The New Jersey Advocate states that the TECM offers a more detailed array of financial and technical inputs than the other models. It notes, for example, that with the TECM, a user can vary the labor costs per hour to match the labor costs in a particular state. Also, the number of hours or minutes required to perform specific functions can be varied based upon climate, terrain, and other relevant factors applicable to a particular wire center.<sup>636</sup> The New Jersey Advocate contends that ability of TECM to develop more precise cost estimates will be invaluable in expanding the use of the proxy models to calculate support for rural carriers and carriers serving extreme areas such as Alaska.<sup>637</sup>

165. ALTS contends that some of the assumptions used in the TECM may suggest alternate input values and for use in the BCPM and the Hatfield models. ALTS is concerned, however, that the TECM has not been as rigorously documented or tested as the other two models and may require entry of special data, many of that may not be publicly available.<sup>638</sup> RTC/GVNW also state that they have had little opportunity to review the TECM. RTC/GVNW concludes that some features of the model may be promising, but questions whether the model can be used in the universal service proceeding because note that the model is not self-contained and could not be used without supporting data from other models to supply the necessary input regarding loop lengths.<sup>639</sup>

### **3. Determination of Forward-Looking Economic Cost for Rural Carriers**

166. Developing a Forward-Looking Economic Cost Model for Rural Carriers.

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<sup>633</sup> *Id.* at 3.

<sup>634</sup> *Id.* at 4.

<sup>635</sup> New Jersey Advocate post-workshop comments at 1.

<sup>636</sup> New Jersey Advocate pre-workshop comments at 2; New Jersey Advocate Jan. 31 *ex parte* at 5.

<sup>637</sup> New Jersey Advocate post-workshop comments at 2.

<sup>638</sup> ALTS post-workshop comments, att. at 1.

<sup>639</sup> RTC/GVNW post-workshop comments at 8 n.18.

Commenters suggest procedures that the Commission should follow to select a cost model for rural carriers.<sup>640</sup> Iowa Utilities Board advises that to assure that the Act's requirements regarding urban and rural rate comparability are met, the Commission should initiate a proceeding in this docket that will allow all interested parties to participate.<sup>641</sup> Iowa Utilities Board further suggests that the Commission include an impact study on the rates charged to the customers of the small, rural carriers in its review of any model.<sup>642</sup> Harris recommends that the Commission should ensure that small companies participate in the model selection process by making the forward-looking cost model available for testing by small companies.<sup>643</sup> Wyoming PSC maintains that the Commission must give state commissions a major role in the development of an acceptable proxy models for rural carriers.<sup>644</sup> Pacific Telecom argues that, because of the unique circumstances of rural areas, the Joint Board should establish a task force specifically to study the development and impact of a cost model for rural carriers.<sup>645</sup> Several commenters also urge the Commission to coordinate the transition to forward-looking costs for rural carriers with access charge and separations reforms because the rural carriers receive over 50 percent of their gross revenue from interexchange access charges and may lose an additional source of revenue if access charges decrease.<sup>646</sup>

167. Other commenters address the characteristics that a cost model applied to rural carriers should have. TDS Telecom and RTC contend that a cost model should provide specific, predictable, and sufficient federal and state support calculations to preserve and advance universal service, enable the offering of quality services at affordable rates, support nationwide access to advanced telecommunications and information services through the availability of comparable rural and urban rates and services, provide correct signals regarding infrastructure investment.<sup>647</sup> USTA maintains that the cost model developed for rural carriers should reflect actual costs.<sup>648</sup> TCA asserts that the Commission should use a cost model for rural carriers only to identify high cost areas, while continuing to base support on actual cost, according to the

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<sup>640</sup> See, e.g., Iowa Utilities Board comments at 4; John Staurulakis comments at 23; RUS comments at 2; TDS Telecom comments at 16; USTA comments at 26; Wyoming PSC comments at 9; RTC reply comments at 8.

<sup>641</sup> Iowa Utilities Board comments at 4. See also John Staurulakis comments at 23.

<sup>642</sup> Iowa Utilities Board comments at 4.

<sup>643</sup> Harris comments at 4.

<sup>644</sup> Wyoming PSC comments at 9.

<sup>645</sup> Pacific Telecom Inc. pre-workshop comments at 3; Pacific Telecom Inc. post-workshop comments at 5.

<sup>646</sup> See, e.g., RUS comments at 2; Wyoming PSC comments at 9; RTC reply comments at 8.

<sup>647</sup> TDS Telecom comments at 16; RTC reply comments at 4.

<sup>648</sup> USTA comments at 26.

model's distribution.<sup>649</sup> Wyoming PSC maintains that the Commission should reconsider the Joint Board's recommendation to apply only a single cost model to all carriers, because "one size" cannot fit all and the disparate needs of the different high cost areas must be reasonably met.<sup>650</sup>

168. Parties also comment regarding the size of the geographic area on which the cost model will base the support calculation. John Staurulakis contends that the selected cost model should not be based on CBG data because census blocks are too large to identify adequately the rural carriers' existing service territory.<sup>651</sup> Instead, John Staurulakis asserts that the model should allow rural carriers the option of using their company-specific costs and recommends that the Commission conduct company-specific cost studies to ensure that the support is specific, predictable, and sufficient.<sup>652</sup> NRPT recommends that the Commission recognize the differences between large, urban ILECs and small, rural ILECs and base the cost model for rural carriers on wire centers or study areas to target the support better.<sup>653</sup> RTC argues that to counter the effects of "cherry picking" by competitors, the cost model should permit rural carriers to receive support based on disaggregated parts of their service areas, so that they receive the actual cost of providing service in the sparsely populated parts of a study area.<sup>654</sup>

169. John Staurulakis advises that the use of a cost model should include a "maximum shift or change" feature that is similar to the provision in section 36.154(f)(1) of the Commission's rules permitting a five percent SPF reduction in the transition to the 25 percent gross allocation factor of non-traffic sensitive costs to the interstate jurisdiction.<sup>655</sup> John

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<sup>649</sup> TCA comments at 5. *See also* USTA comments at 26; RTC reply comments at 8.

<sup>650</sup> Wyoming PSC comments at 9.

<sup>651</sup> John Staurulakis comments at 14. *See also* NRPT comments at 4.

<sup>652</sup> John Staurulakis comments at 14.

<sup>653</sup> NRPT comments at 4.

<sup>654</sup> RTC comments at 10.

<sup>655</sup> John Staurulakis comments at 15. *See also* RTC reply comments at 9. The subscriber plant factor (SPF) is an allocation factor formerly used to allocate loop costs between the state and interstate jurisdictions. *See* 47 C.F.R. § 36.154(e). The SPF was a traffic sensitive allocation factor. Because increases in relative interstate usage caused carriers' SPFs to escalate rapidly during the early 1980's, the Commission, in a series of proceedings, instituted a flat-rate 25 percent interstate allocation factor. This gross allocation factor was to be phased in during an eight-year period, 1986 to 1993, subject to the limitation that a carrier's transitional interstate allocation factor would not decrease more than five percent each year (SPF transition). The five percent limit on the change in interstate allocation measured the combined impact of the both the SPF transition and the USF transition that was phased in pursuant to 47 C.F.R. § 36.641 during the same eight-year transition period as the SPF transition. Carriers with very high SPFs were directed to extend their transition from a traffic sensitive to a flat-rate allocation factor, subject to the five percent limitation, until the 25 percent allocation was reached. Once a carrier's transition to a 25 percent allocation factor has been achieved, the five percent limitation on the change in

Staurulakis contends that such a feature would ensure that a carrier's universal service payment does not increase or decrease by more than five percent per year to assure the predictability of the reconstituted universal service support mechanisms and protect rural carriers from major shifts in the amount of support received due to census changes, errors in census data, or other factors.<sup>656</sup> RTC also suggests that even once a validated model is developed, the Commission should allow parties to petition for waivers so that companies with cost structures not fitting within the model may obtain relief.<sup>657</sup>

#### 4. Applicable Benchmarks

170. Use of a nationwide benchmark. There is general support for the use of a nationwide benchmark.<sup>658</sup> The West Virginia Consumer Advocate contends that a nationwide benchmark will ensure that telecommunications rates will remain affordable throughout the nation and will not vary widely from state to state.<sup>659</sup> Comptel states that a single benchmark will bring uniformity and predictability to the support mechanism and reduce the possibility that the support mechanism may favor carriers operating in some regions of the country.<sup>660</sup> Comptel also contends that a nationwide benchmark will be easier to administer than regional or state wide benchmarks.<sup>661</sup> In contrast, RUS and the Georgia Consumer's Council suggest that the Commission consider regional or statewide benchmarks. They express concern that if the national benchmark is above the regional or state wide level, carriers in that region or state

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interstate allocation is no longer operative. *See* Florida Public Service Commission Request for Interpretation of the Applicability of the Limit on Change in Interstate Allocation, Section 36.154(f) of the Commission's Rules, *Order*, FCC 97-83 (rel. Mar. 17, 1997); 47 C.F.R. § 36.154(f)(1). *See also* Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, *Decision and Order*, CC Docket No. 80-286, 89 FCC 2d 1 (1982) (adopting Joint Board's recommendation to freeze SPF at 1981 levels); Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, *Decision and Order*, CC Docket No. 80-286, 96 FCC 2d 781 (1984) (adopting Joint Board's recommendation to establish a fixed 25 percent interstate allocation factor to be phased in over four years with a maximum reduction in a carrier's interstate allocation factor of ten percentage points per year); MTS and WATS Market Structure and Amendment of Part 67 of the Commission's Rules and Establishment of a Joint Board, *Decision and Order*, CC Docket Nos. 78-72 and 80-286, 50 Fed. Reg. 939 (December 1984) (increasing transition period from four to eight years with a maximum reduction in a carrier's interstate allocation of five percentage points per year); Amendment of Section 36.154 of the Commission's Rules, *Memorandum Opinion and Order*, 6 FCC Rcd. 1873 (1991) (allowing carriers with very high SPF to extend transition.)

<sup>656</sup> John Staurulakis comments at 15.

<sup>657</sup> RTC reply comments at 9.

<sup>658</sup> *See, e.g.*, MCI comments at 8; Sprint PCS comments at 7; Texas PUC comments at 8.

<sup>659</sup> West Virginia Consumer Advocate comments at 6.

<sup>660</sup> Comptel comments at 11.

<sup>661</sup> *Id.*

recover less than the reasonable costs of service.<sup>662</sup>

171. Average revenue-per-line benchmark. The majority of commenters appear to support the use of a revenue-based benchmark, although there is strong disagreement regarding what revenues to include in that benchmark.<sup>663</sup> Time Warner states that use of a benchmark that considers the revenues received by the carrier is the most efficient and fair mechanism for establishing the need for high cost support.<sup>664</sup> Several commenters, however, oppose the use of a revenue-based benchmark. ALLTEL and USTA contend that by using a revenue-based benchmark will permit the size of the fund to be manipulated by creating an artificially high revenue per line and thereby precluding eligible telecommunications carriers with legitimate universal service requirements from receiving funding. They also argue that revenues are not related to the cost of providing services, which is what the universal service mechanism is supposed to address.<sup>665</sup> MFS contends that revenues should not be used because the development of competition in local markets should bring down revenues, thereby increasing the support level defined by a revenue-based benchmark.<sup>666</sup>

172. Many commenters agree with the Joint Board's recommendation to use a revenue-based benchmark that includes revenues from local, discretionary, and access services.<sup>667</sup> Those commenters assert that the Joint Board's recommendation recognizes that carriers receive far more revenue from their customers to cover the costs of basic service than they collect from rates for basic service.<sup>668</sup> Other commenters contend that in establishing the benchmark, the Commission should include a broader revenue base than the Joint Board recommended. Several commenters suggest that revenue from yellow pages should be included in a revenue benchmark, because yellow pages have been historically linked to residential telephone service.<sup>669</sup> Comptel and MCI argue that revenues from intraLATA toll service should be included in the benchmark because the same network components that are used for basic service are also used to make intraLATA toll calls.<sup>670</sup>

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<sup>662</sup> Georgia Consumer's Council comments at 2; RUS comments at 3.

<sup>663</sup> See, e.g., Ad Hoc comments at 11; Cincinnati Bell comments at 9; PacTel reply comments at 14.

<sup>664</sup> Time Warner comments at 16.

<sup>665</sup> ALLTEL comments at 9; USTA reply comments at 11.

<sup>666</sup> MFS comments at 24.

<sup>667</sup> See, e.g., Ameritech comments at 23; Worldcom comments at 21; ALTS reply comments at 2-3.

<sup>668</sup> See, e.g., NCTA comments at 10; Teleport comments at 6; West Virginia Consumer Advocate comments at 5.

<sup>669</sup> See, e.g., AT&T comments at 7; Comptel comments at 3; Time Warner comments at 22-23.

<sup>670</sup> Comptel comments at 11; MCI comments at 8 n. 3.

173. Many commenters, including most ILECs, assert that revenues from discretionary and access services should not be included in the calculation of a benchmark.<sup>671</sup> They contend that for setting the benchmark only revenues from the supported services should be considered because only the cost of providing those services is considered in establishing the costs of providing the supported services.<sup>672</sup> These commenters conclude that because discretionary services and access services are not among the supported services, and thus their costs are not included in calculating the cost of service, the revenues from those services should be excluded from the benchmark.<sup>673</sup> For similar reasons, GTE argues that revenue from yellow pages should be excluded from revenue used to calculate the benchmark.<sup>674</sup> Several commenters contend that the benchmark should not include revenues from discretionary and access services, because the proxy models calculate the costs for the supported services and do not include the costs of discretionary and access services.<sup>675</sup>

174. Benchmark based on rates. Only a few commenters specifically address the use of a rate-based benchmark. Urging the Commission to use as the benchmark the national average urban basic local service rate, including subscriber line charges, Sprint asserts that when the Commission and states finish their proceedings to eliminate implicit subsidies, the rates for local service will closely reflect the economic cost of service.<sup>676</sup> TCA states that the benchmark should be based on a reasonable rate for basic local service alone and that the rate chosen must meet the principle of keeping rural rates comparable to urban rates.<sup>677</sup> In contrast, Time Warner asserts that the Joint Board was correct to reject a rate-based benchmark because such a benchmark only reflects basic service rates and does not take into account all the revenues a carrier receives from a customer that contribute to the costs of providing basic service.<sup>678</sup>

175. Benchmark based on affordability. Several commenters support the use of a benchmark based on some index of affordability. Puerto Rico Tel Co. asserts that affordability

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<sup>671</sup> See, e.g., Cincinnati Bell comments at 9; TDS Telecom comments at 35; Aliant reply comments at 3.

<sup>672</sup> See, e.g., ALLTEL comments at 9; California SBA comments at 4-5; CWA reply comments at 16.

<sup>673</sup> See, e.g., AT&T reply comments at 11; GTE reply comments at 30.

<sup>674</sup> GTE reply comments at 31-32.

<sup>675</sup> See, e.g., Cincinnati Bell comments at 9; Texas PUC comments at 6; Puerto Rico Tel. Co. reply comments at 24.

<sup>676</sup> Sprint comments at 19.

<sup>677</sup> TCA comments at 6.

<sup>678</sup> Time Warner comments at 15-16 (*citing* Recommended Decision at 248).



must be an integral factor in determining the level of support provided for a service area.<sup>679</sup> Puerto Rico Tel Co. contends that the benchmark for such areas of low penetration should be adjusted by a factor proportionate to the difference between the income level for that area and the national average income level.<sup>680</sup> BellSouth contends that an affordability benchmark advances the principle of service at affordable rates included in section 254, and is not subject to the same types of manipulation that a revenue-based benchmark may be.<sup>681</sup> BellSouth and USTA propose that the Commission base the benchmark on one percent of household income.<sup>682</sup> USTA argues that the use of household income is reasonable because it reflects what customers can reasonably be expected to pay for service.<sup>683</sup>

176. Cost-based benchmark. Several parties contend that the benchmark should be based on the average cost of providing service, rather than on revenues. They argue that, as the Joint Board noted,<sup>684</sup> revenues are subject to great fluctuation, particularly as new competitors enter the market.<sup>685</sup> ALLTEL and MFS urge the Commission to base the benchmark on the national average cost of service developed by the proxy models.<sup>686</sup> They state that the purpose of the universal service support mechanism is to support high cost areas, not areas with low revenues.<sup>687</sup> The California PUC also argues that the best way to assure that the fund is directed to high costs areas is to adopt a cost-based benchmark. The Maryland PSC suggests that the Commission consider a benchmark based on the rates for unbundled network elements established by the state pursuant to arbitration proceedings.<sup>688</sup> RTC and several rural telephone companies assert that the benchmark should be based on average embedded costs for ILECs.<sup>689</sup>

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<sup>679</sup> Puerto Rico Tel. Co. comments at 18.

<sup>680</sup> *Id.* at 27. Puerto Rico Tel Co. reply comments at 13.

<sup>681</sup> BellSouth reply comments at 10. BellSouth states that a revenue benchmark may be manipulated by the revenues that are included or excluded from the benchmark. BellSouth comments at 6 n. 14.

<sup>682</sup> BellSouth comments at 5-6 n. 13; USTA comments at 11. USTA also proposes that the benchmark for single line business service be set at 1.5 times the residential benchmark, or, in other words, 1.5 percent of the county median household income. USTA comments at 11.

<sup>683</sup> *Id.*

<sup>684</sup> *See* Recommended Decision, 12 FCC Rcd at 249.

<sup>685</sup> *See, e.g.,* California PUC comments at 6; TDS Telecom comments at 32; MFS reply comments at 16.

<sup>686</sup> ALLTEL comments at 9; MFS reply comments at 16.

<sup>687</sup> MFS comments at 26.

<sup>688</sup> Maryland PSC reply comments at 7.

<sup>689</sup> RTC reply comments at 19. *See also* TDS Telecom reply comments at 3.

177. Other benchmarks. U S West recommends that the Commission adopt the Federal Funding Benchmark (FFB) of \$30 that U S West proposed as the basis for distributing universal service support.<sup>690</sup> U S West states that its FFB will result in a reasonably sized high cost fund. It contends that there is support in the record for a \$30 level because that amount is slightly lower than the highest statewide average residential rate and generally corresponds to one percent of national median household income, the benchmark proposed by some commenters.<sup>691</sup>

178. Use of separate benchmarks for residential and single-line business services. Several commenters express support for the Joint Board's recommendation to have separate benchmarks for residential and single-line business services.<sup>692</sup> USTA supports the use of separate benchmarks for residential and single-line business service, and argues that the former benchmark should be based on the median household income in the county.<sup>693</sup> The Maryland PSC states that if support is to be provided for single-line businesses, a separate benchmark should be established.<sup>694</sup> Roseville Tel. Co. and TDS Telecom assert that because ILECs do not keep records of revenues separately for residential and business calling, developing two benchmarks will impose difficult record-keeping and collections burdens on ILECs.<sup>695</sup>

## **C. Mechanisms for Carriers Until Support is Provided Based on Forward-Looking Economic Cost**

### **1. Non-Rural Carriers**

179. Alternative Options. BANX proposes another way to determine forward-looking economic costs for use in calculating universal service support. Citing three advantages to doing so, BANX proposes that rather than proxy models, the Commission should use the rates for UNEs as the basis for calculating the cost of providing the supported services.<sup>696</sup> First, BANX

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<sup>690</sup> U S West comments at 6. For a full description of U S West's FFB proposal *see* U S West NPRM comments at 12.

<sup>691</sup> U S West comments at 28-29 (stating that a price comparison of BOC basic residential service shows that \$30.11 is the highest statewide average residential service price in the nation).

<sup>692</sup> *See, e.g.*, Texas PUC comments at 8; Worldcom comments at 21; Ohio PUC reply comments at 5.

<sup>693</sup> USTA comments at 11.

<sup>694</sup> Maryland PSC comments at 6-7.

<sup>695</sup> Roseville Tel Co. comments at 6, 15; TDS Telecom comments at 35-36.

<sup>696</sup> BANX notes that "customer care" costs would have to be added to the price of the UNEs to determine the cost of providing the supported services. It suggests that this amount could be determined by reference to the discount between wholesale and retail rates determined by the state under section 253(d)(3). BANX reply comments at 14-15.

contends that using UNEs would avoid the administrative difficulties in administering different support levels for hundreds or thousands of CBGs in each state. Second, BANX asserts that assuming that the rates for UNEs reflect states' determinations of the cost of the underlying facilities, the UNEs would have a stronger economic basis than the hypothetical costs produced by the proxy models. Finally, BANX explains that there would not be any potential arbitrage problem between the costs of UNEs and the level of universal service support.<sup>697</sup>

## **2. Rural Carriers**

180. In General. Rural carriers generally support the Joint Board's recommendation that a forward-looking economic cost model not be used immediately to calculate their high cost support.<sup>698</sup> Most rural carriers, however, object to the scheduled transition to a mechanism for calculating support based on forward-looking costs.<sup>699</sup> Rural carriers also oppose the Joint Board's recommendation to fixed support levels during the transition.<sup>700</sup> Moreover, they join other ILEC commenters disputing the Joint Board's recommendation to make support portable to competitive carriers.<sup>701</sup> State regulatory commissions from states with many rural carriers generally agree with the rural carriers' comments regarding the Joint Board's recommendations.<sup>702</sup> IXC's, CLEC's, some state regulatory commissions, and others, however, generally endorse the Joint Board's recommendations regarding the support mechanism for rural carriers.<sup>703</sup> Some commenters contend that the Commission should immediately discontinue support based on embedded costs for all carriers.<sup>704</sup>

181. Use of a Forward-Looking Economic Cost Model. Most rural carriers oppose the use of a forward-looking cost cost model and advocate the continued use of embedded cost to

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<sup>697</sup> *Id.* at 14.

<sup>698</sup> *See, e.g.*, RT comments at 7; RTC comments at 10; TDS Telecom comments at 15; Tularosa Basin Tel. comments at 6; USTA comments at 26; Rock Hill Tel. Co. reply comments at 2.

<sup>699</sup> *See, e.g.*, Evans Tel. comments at 9; John Staurulakis comments at 4; RTC reply comments at 2.

<sup>700</sup> *See, e.g.*, John Staurulakis comments at 10; TCA comments at 2; Tularosa Basin Tel. comments at 7; USTA comments at 27.

<sup>701</sup> *See, e.g.*, Evans Tel. comments at 12; ITC reply comments at 3; John Staurulakis comments at 7; Minnesota Coalition comments at 34; RT comments at 11; RTC comments at 15; TCA comments at 5; TDS Telecom comments at 41; Western Alliance comments at 14; Lufkin Conroe reply comments at 1.

<sup>702</sup> *See, e.g.*, Iowa Utilities Board comments at 3; Wyoming PSC comments at 9.

<sup>703</sup> *See, e.g.*, Citizens Utilities comments at 4; ITI comments at 2; WorldCom comments at 19; GCI reply comments at 2; MCI reply comments at 5; MFS reply comments at 10.

<sup>704</sup> *See, e.g.*, Ameritech comments at 13; CSE Foundation comments at 5.

determine high cost support for all carriers.<sup>705</sup> Rural carriers and some state PUCs contend that because rural areas are more expensive to serve than urban areas, the application of current cost models to rural telephone companies produces inconsistent and insufficient cost calculations.<sup>706</sup> Parties contend that rural carriers incur much higher costs per-subscriber than their larger counterparts, because rural carriers are unable to realize the economies of scale and scope available to ILECs serving densely populated areas.<sup>707</sup> Minnesota Coalition asserts that rural carriers' small revenue bases and high costs prohibit the generation of the large cash flows necessary for them to withstand sharp reductions or fluctuations in particular revenue categories.<sup>708</sup> Minnesota Coalition also asserts that the current embedded cost mechanism must be maintained, because the pending access charge reform proceeding will eliminate the offsetting effect of access revenues to any reduction in support.<sup>709</sup> RTC expresses concern that, because the Joint Board recommends that ILECs contribute to the new universal service support mechanisms, providing support at a level other than a 100 percent of embedded cost will result in a further net reduction of support to ILECs.<sup>710</sup>

182. Transition to a Forward-Looking Economic Cost. Many commenters assert that the Joint Board's recommendation to shift rural carriers to a forward-looking economic cost

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<sup>705</sup> See, e.g., ALLTEL comments at 8; GSA comments at 11; John Staurulakis comments at 4; Evans Tel. comments at 9; RTC reply comments at 2.

<sup>706</sup> See, e.g., Evans Tel. Co. comments at 11; GVNW comments at app. B, 3, 4; Harris comments at 2; Iowa Utilities Board comments at 3; John Staurulakis comments at 4, 11; Minnesota Coalition comments at 18; Roseville Tel. Co. comments at 12; Western Alliance comments at 36; Wyoming PSC comments at 8; ALLTEL reply comments at 3; RTC reply comments at 2.

<sup>707</sup> Harris comments at 3 (maintaining that rural carriers experience higher service costs than other carriers because they must use longer than average transport links to carry less than average amounts of traffic due to the distance between urban and rural areas, run smaller cables with lower cable fill factor for longer distances due to lower subscriber density, serve smaller concentrations of customers with their switching equipment, and cannot smooth the effects of unusual geographic features by averaging the proxy results due to fewer exchanges); ALLTEL comments at 8 (averring that rural carriers have higher costs because they experience greater volatility in their customer base than other carriers); ICORE comments at 12 (arguing that a proxy model cannot possibly replicate each carrier's costs because rural carriers' costs are volatile and do not follow broad industry trends); Minnesota Coalition comments at 18 (asserting that rural service areas are too small to make investments in an even pattern, as required by a proxy-based cost calculation). See also Iowa Utilities Board comments at 3; Western Alliance comments at 3.

<sup>708</sup> Minnesota Coalition comments at 16. See also Iowa Utilities Board comments at 3 (maintaining that even a small miscalculation by a proxy model of the number of lines a small ILEC serves would substantially affect that carrier's cost calculation); RT comments at 3; Western Alliance comments at 3.

<sup>709</sup> Minnesota Coalition comments at 13.

<sup>710</sup> RTC comments at 14. See also TDS Telecom comments at 24.

methodology over a six-year transition period is contrary to the requirements of the Act.<sup>711</sup> Minnesota Coalition contends that the Commission should continue to base support to rural carriers on their embedded costs because section 254 requires that support be "sufficient" to achieve rates in rural areas that are affordable and reasonably comparable to rates charged for similar services in urban areas.<sup>712</sup> Similarly, ALLTEL and USTA maintain that the Commission should develop and validate a cost model that meets the criteria of section 254(b)(5) before starting the rural carriers' transition to forward-looking costs.<sup>713</sup> Arguing that Congress added section 254 to the Act to protect rural areas because rural areas are less likely to attract competition, some parties contend that the mandate in section 254 to preserve and advance universal service requires the exemption of rural carriers from the use of a proxy model until competition develops in rural areas.<sup>714</sup> Furthermore, many of these commenters state that rural carriers rely upon federal and state universal service support to maintain affordable rates and insist that a support mechanism based on forward-looking economic cost will undermine the provision of universal service by providing carriers reduced support.<sup>715</sup> Western Alliance argues that the Joint Board's recommendations if adopted, would destroy section 254's rural safeguards to the detriment of telecommunications infrastructure investment, service, quality, and rates and general economic development in rural areas.<sup>716</sup>

183. Many commenters, primarily non-ILECs, support the Joint Board's recommendations to shift rural carriers gradually to a support mechanism based on forward-looking economic cost to calculate support.<sup>717</sup> MCI maintains that the reasons for adopting forward-looking costs apply equally to urban and rural areas.<sup>718</sup> Moreover, Virginia's Rural, a group of rural carriers in Virginia, support the recommended transition to cost models for rural carriers because it reflects "a proper balance in determining the universal service support for

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<sup>711</sup> See, e.g., John Staurulakis comments at 7; Minnesota Coalition comments at 10, 19; Western Alliance comments at 2; Wyoming PSC comments at 9; Evans Tel. Co. reply comments at 3.

<sup>712</sup> Minnesota Coalition comments at 10, 19. See also Evans Tel. Co. comments at 8; John Staurulakis comments at 13; Wyoming PSC comments at 9.

<sup>713</sup> ALLTEL comments at 8; USTA comments at 8. See also Evans Tel. Co. comments at 8.

<sup>714</sup> TCA comments at 9.; Western Alliance comments at 2. See also John Staurulakis comments at 7; Minnesota Coalition comments at 17; Evans Tel. Co. reply comments at 3.

<sup>715</sup> See, e.g., Minnesota Coalition comments at 16; RT comments at 3; Western Alliance comments at 3.

<sup>716</sup> Western Alliance comments at 2. See also Evans Tel. Co. comments at 9; RUS comments at 1; Universal Service Alliance comments at 4.

<sup>717</sup> See, e.g., Citizens Utilities comments at 4; MCI reply comments at 5.

<sup>718</sup> MCI reply comments at 5.

rural companies."<sup>719</sup> ITI contends that a long-run incremental cost methodology "will ensure that universal service support levels correspond to the true costs of providing universal service and thereby both encourage competition in rural areas and bolster efficiency in the provision of universal service."<sup>720</sup> In addition, the California PUC argues that, even though any reduction in support from the transition to a cost model may cause rural rates to rise, section 254(b) of the Act does not require that rates in high cost areas be the same as those in low cost areas; instead, this provision requires only that rates be reasonably comparable.<sup>721</sup> CSE Foundation avers that because the \$5 billion annual rural high cost support amount it has estimated substantially exceeds the support estimates for low-income subscribers and educational institutions, the Commission should not grant any support based on embedded costs to rural carriers through a transition mechanism.<sup>722</sup> Rather than recommending that rural carriers move to proxies, however, CSE Foundation advocates calculating support for all carriers on a competitive bidding system.<sup>723</sup>

184. Length of Transition. Other carriers contend that the Commission should implement a transition period for rural carriers that is longer than the six years recommended by the Joint Board.<sup>724</sup> MCI, however, maintains that the recommended transition is more than sufficient to ensure that there is no harmful effect to universal service as a result of the transition to the use of forward-looking costs.<sup>725</sup> Ameritech asserts that rural carriers should begin the transition immediately upon development of a suitable cost model, instead of collecting support at protected levels for a preceding three-year period.<sup>726</sup>

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<sup>719</sup> Virginia's Rural comments at 2.

<sup>720</sup> ITI comments at 3.

<sup>721</sup> California PUC comments at 4.

<sup>722</sup> CSE Foundation comments at 5 (*citing* Telecommunications Industries Analysis Project, "What is the Price of Universal Service? Impact of Deaveraging Nationwide Urban/Rates," TIAP, Cambridge, MA (1995)). *See also* Chicago reply comments at 13.

<sup>723</sup> CSE Foundation comments at 6.

<sup>724</sup> *See, e.g.*, California SBA comments at 3 (suggesting that the Commission give carriers serving high cost areas a longer transition period to bring their operations in line with the least cost, most efficient technology standard that the proxy models will utilize. California SBA, however, does not state what would constitute a "reasonable time"); Texas PUC comments at 8 (asking that the Commission allow rural companies to maintain their current level of support until the state designates another eligible carrier within the same service area under section 214(e) of the Act); Western Alliance comments at 26 (arguing that the transition period should be extended to enable the carriers to recover their revenue requirements for prudently invested, but unamortized amounts); RTC comments at 29.

<sup>725</sup> MCI reply comments at 5.

<sup>726</sup> Ameritech comments at 13.

185. Early Use of Forward-Looking Economic Cost Methodology. The majority of commenters support permitting rural carriers to determine costs based on forward-looking economic cost prior to the date of mandatory shift to the use of proxy models, as recommended by the Joint Board.<sup>727</sup> In contrast, Maryland PSC maintains that rural carriers should not be allowed to use a cost model before the mandatory transition begins. Maryland PSC states that allowing rural carriers to do so would increase the support mechanism because only carriers that would receive more support under a cost model would switch to forward-looking costs at an earlier date.<sup>728</sup>

186. Fixed Support Levels. Rural carriers generally oppose the use of fixed support levels for high loop and switching costs and LTS recovery and argue that the Commission should permit full recovery of a carrier's annual embedded costs during the transition to a proxy model.<sup>729</sup> Many commenters contend that fixing support levels during the transition to a proxy model is contrary to requirements set forth in the Act. Parties argue that fixing the support will prevent carriers from recovering costs incurred in meeting their service requirements as carriers of last resort and costs incurred as a result of state and federal regulatory directives for new services and facilities upgrades, contrary to the requirement of section 254(b)(5) that the universal service support be sufficient.<sup>730</sup> Rural Alliance asserts that the Joint Board's proposal to fix support departs from the congressional directive to preserve and enhance universal service.<sup>731</sup> Minnesota Coalition argues that the proposals to fix current support levels fail to reflect variations in calling scope, income level, and cost of living and would therefore violate the statutory requirements that rates be affordable and that rural rates be "reasonably comparable" to urban rates.<sup>732</sup>

187. Parties assert that fixing support levels would interrupt long-term capital improvement plans and discourage investment.<sup>733</sup> ICORE and Western Alliance state that the Commission should not fix support levels because rural carriers have highly volatile and

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<sup>727</sup> See, e.g., Harris comments at 4; Iowa Utilities Board comments at 5; USTA comments at 26.

<sup>728</sup> Maryland PSC comments at 8.

<sup>729</sup> See, e.g., Evans Tel. Co. comments at 9; John Staurulakis comments at 10; Minnesota Coalition comments at 13; RTC comments at 12; TDS Telecom comments at 24. Tularosa Basin Tel. comments at 7; USTA comments at 27.

<sup>730</sup> See, e.g., Evans Tel. Co. comments at 8; John Staurulakis comments at 10; Minnesota Coalition comments at 19; TDS Telecom comments at 39; Western Alliance comments at 26, 30; ITC reply comments at 3; Lufkin-Conroe reply comments at 3; RTC reply comments at 10.

<sup>731</sup> Rural Alliance comments at 3. See also USTA comments at 8.

<sup>732</sup> Minnesota Coalition comments at 13.

<sup>733</sup> See, e.g., Evans Tel. Co. comments at 8, 9; ITC comments at 4, 5; RTC comments at 12; Rural Alliance comments at 7; TCA comments at 2; USTA comments at 8; Western Alliance comments at 37.

unpredictable costs due to extreme weather conditions that cause equipment and repair costs to increase significantly and unpredictably.<sup>734</sup> ICORE contends that fixing the overall size of the support mechanism rather than protecting support on a carrier-to-carrier basis would lessen the severe impact holding support levels constant would have on high cost rural carriers.<sup>735</sup> USTA argues that holding support levels constant would remove any incentive for rural companies to serve any area with per-line costs above the protected amounts.<sup>736</sup> Evans Tel. Co. contends that protecting support would overcompensate carriers that are operating with costs reduced from costs reported in 1996 because they do not need to build additional facilities or undertake other operating costs.<sup>737</sup>

188. Fixed Loop Support. Several commenters contend that, because companies may have invested substantial amounts in 1996 on the assumption that they would recover a portion of this investment from high cost support mechanisms, the mechanism for calculating protected high cost assistance to carriers with high cost loops used in 1997 should be based on 1996 loop counts, instead of the recommended 1995 counts.<sup>738</sup> Many parties also contend that the Commission should determine 1998 fixed loop support on the basis of year-end 1997 loops counts, instead of the recommended year-end 1996 counts.<sup>739</sup> GVNW proposes these modifications in order to give carriers the ability to modify their investment policies to reflect future revenue streams.<sup>740</sup> RT asserts that because the loops counts will be two years old, adoption of the Joint Board's recommendation regarding fixed loop support would result in insufficient increases in revenue to reflect a growth in loops.<sup>741</sup> RT also contends that because outside plant construction takes place in the summer, 1995 loop counts would not permit a full year of depreciation for 1995 investments.<sup>742</sup> As an alternative to the Joint Board's recommendation, the ILEC Associations propose that instead of calculating support based on a protected mechanism, rural carriers receive support for their loop costs that exceed 115 percent of the 1995 nationwide average loop cost that is annually adjusted to inflation. The percentage of the above-average loop cost that rural carriers may recover from the support mechanism will

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<sup>734</sup> ICORE comments at 7; Western Alliance comments at 25.

<sup>735</sup> ICORE comments at 9.

<sup>736</sup> USTA reply comments at 9.

<sup>737</sup> Evans Tel. Co. comments at 8.

<sup>738</sup> See, e.g., ALLTEL comments at 10; GVNW comments at 14; John Staurulakis comments at 22; RT comments at 7; USTA comments at 28; Rock Hill Tel. Co. reply comments at 4.

<sup>739</sup> See, e.g., ALLTEL comments at 10; GVNW comments at 14; RT comments at 7; USTA comments at 28.

<sup>740</sup> GVNW comments at 14.

<sup>741</sup> RT comments at 7.

<sup>742</sup> RT comments at 7.



remain consistent with the current provisions concerning support for high loop costs in the Commission's rules.<sup>743</sup> The ILEC Associations argue that their alternative proposals for high cost loop support, DEM weighting assistance, and LTS benefits address the Joint Board's concerns, while allowing rural carriers to recover their prudently invested costs and providing rural subscribers affordable service and access to advanced services.<sup>744</sup>

189. Fixed DEM Support. Several parties offer alternative proposals to the Joint Board's recommendations. ALLTEL contends that the DEM weighting support mechanism should permit carriers to update their switching costs annually and advocates that the weighted DEM be divided by the supportable lines each year to determine the support per line.<sup>745</sup> The ILEC Associations propose that support for high switching costs should be provided by protecting the interstate allocation factor for the weighted DEM for each study area. This allocation factor would then be applied annually to traffic sensitive investment and expenses, and furthermore, all interstate allocated amounts that are in excess of the unweighted DEM would be recovered through the new support mechanisms.<sup>746</sup> Also, United Utilities recommends the adoption of actual switched minutes of use (SMOU) for allocating Category 3 switching costs because it contends that the continued use of DEM does not price interstate access services based on cost and thus, clearly violates the requirement to make all support mechanisms explicit.<sup>747</sup> Ameritech, however, asserts that because they will recover payments from the new universal service support mechanisms, rural carriers should be required to remove the effects of DEM weighting from their access rates immediately.<sup>748</sup>

190. Fixed LTS Support. USTA maintains that the Joint Board's recommended

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<sup>743</sup> USTA presents this proposal to calculate support for high loop costs, DEM weighting, and LTS on behalf of the Organization for the Protection and Advancement of Small Telecommunications Companies and the National Telephone Cooperative Association. See Letter from Porter Childers, USTA, to William F. Caton dated February 14, 1997 (ILEC Associations' February 14 *ex parte*); Letter from Porter Childers, USTA, to William F. Caton dated March 13, 1997 (ILEC Associations' March 13 *ex parte*). In its comments, however, USTA proposes that carriers should recover 100 percent of their embedded unregulated and unseparated loop, transport, and switching costs associated with local service as part of a single mechanism to provide universal service support. See USTA comments at 14; Letter from Roy Neel, USTA, to Chmn. Reed E. Hundt dated October 3, 1966 (USTA October 3 *ex parte*).

<sup>744</sup> Letter from Porter Childers, USTA, to William F. Caton dated February 14, 1997 (ILEC Associations' February 14 *ex parte*); Letter from Porter Childers, USTA, to William F. Caton dated March 13, 1997 (ILEC Associations' March 13 *ex parte*). See *infra*. paras. \_ and \_ for discussion on DEM weighting and LTS.

<sup>745</sup> ALLTEL comments at 10.

<sup>746</sup> See Letter from Porter Childers, USTA, to William F. Caton dated February 14, 1997 (ILEC Associations' February 14 *ex parte*); Letter from Porter Childers, USTA, to William F. Caton dated March 13, 1997 (ILEC Associations' March 13 *ex parte*).

<sup>747</sup> United Utilities comments at 8.

<sup>748</sup> Ameritech comments at 13.

methodology for assigning LTS to individual study areas would produce anomalous results, because LTS amounts would be assigned to an individual study area based on the relative size of its revenue requirement without regard to revenues received from other sources, such as the SLC and CCL charge.<sup>749</sup> The ILEC Associations propose that the level of LTS should be protected at the percentage of the total common line pool that was represented by LTS in 1996. This ratio would then be applied to the annual common line revenue requirement that NECA calculates and recovered through the new support mechanisms.<sup>750</sup> ALLTEL agrees with the Joint Board's recommendation to protect LTS at 1996 levels, because de-pooled ILECs will no longer be required to fund this support.<sup>751</sup> ALLTEL maintains, however, that the recommended method for calculating LTS recovery would produce inequitable and insufficient support for the highest cost study areas.<sup>752</sup> ALLTEL suggests that the Commission should determine LTS recovery by calculating each study area's 1996 interstate common line revenue requirement at the authorized rate of return.<sup>753</sup> Each study area's 1996 SLC revenues and CCL charge revenues would then be subtracted from that study area's revenue requirement, and the difference would be divided by the number of supportable lines in the study area to define the amount of support per line required to replace LTS payments.<sup>754</sup> ALLTEL contends that this methodology comports with the Act, because it grants study area specific LTS per line support.<sup>755</sup> Harris argues that calculating each company's fixed LTS support as its annual net settlement with the NECA Common Line Pool during a particular year, after removing out of period adjustments would be easier to implement than the Joint Board's recommended approach and would also effectively cap the SLC and CCL charge.<sup>756</sup> Harris would grant members of the Common Line Pool the choice of leaving the pool or maintaining their existing SLC and CCL charge rates and asserts that its proposal would function as an incentive for pool members electing to remain to control

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<sup>749</sup> USTA comments at 29.

<sup>750</sup> See Letter from Porter Childers, USTA, to William F. Caton dated February 14, 1997 (ILEC Associations' February 14 *ex parte*); Letter from Porter Childers, USTA, to William F. Caton dated March 13, 1997 (ILEC Associations' March 13 *ex parte*). In its comments, however, USTA proposes that the Commission calculate each year's protected LTS requirement by subtracting from the year-end 1996 common line revenue requirement, including the rate of return, end-user charges and carrier common line revenues. This total LTS support requirement would then be divided by supportable loops to determine the protected per-loop amount. See USTA comments at 29.

<sup>751</sup> ALLTEL comments at 10.

<sup>752</sup> ALLTEL comments at 11.

<sup>753</sup> ALLTEL comments at 11.

<sup>754</sup> ALLTEL comments at 11.

<sup>755</sup> ALLTEL comments at 11.

<sup>756</sup> Harris comments at 5.

common line costs and stimulate demand.<sup>757</sup> Harris acknowledges that modifications might be necessary to the extent that there were any net contributors to the common line pool apart from LTS contributors.<sup>758</sup>

191. IXC, wireless providers, and others, however, support the Joint Board's recommendations regarding fixed support levels for rural carriers.<sup>759</sup> WorldCom states that it does not oppose fixed payments, provided that the support is portable to all carriers.<sup>760</sup> WorldCom expresses concern, however, that the Joint Board proposes to retain the current contribution system, which requires only IXCs to fund the mechanism, during the transition period to proxy models.<sup>761</sup>

192. Waivers for Unusual Operating Conditions. Cathey, Hutton contends that because some carriers may have incurred unusual expenses during the benchmark year for protecting the support, the Commission should allow carriers to submit a cost study with the costs adjusted, or "normalized" to reflect the carriers' typical cost structure to establish the protected support amount.<sup>762</sup> NRPT argues that protecting the support at previous years' costs will provide inadequate support to carriers that have committed to make facility upgrades over a number of years in their study area waiver applications.<sup>763</sup> NRPT thus suggests that the support provided to carriers that have acquired rural exchanges recently include the cost data and modernization commitments made in the carriers' study area waiver.<sup>764</sup> TDS Telecom asserts that the Commission should provide increased high cost compensation for network improvement costs and incorporate an adjustment factor increasing protected high cost compensation at a rate consistent with "healthy" investment.<sup>765</sup>

193. Support for New Service Areas. Some commenters contend that the mechanism set forth in the Recommended Decision would discriminate against a carrier that began operations or bought additional exchanges after the benchmark year used for protecting the support levels. These commenters explain that because such a carrier would not have historical

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<sup>757</sup> Harris comments at 6.

<sup>758</sup> Harris comments at 6.

<sup>759</sup> *See, e.g.*, GCI reply comments at 5.

<sup>760</sup> WorldCom comments at 19.

<sup>761</sup> WorldCom comments at 19 (arguing that requiring only IXCs to contribute would be unlawful).

<sup>762</sup> Cathey, Hutton comments at 9.

<sup>763</sup> NRPT comments at 3.

<sup>764</sup> NRPT comments at 3.

<sup>765</sup> TDS Telecom comments at 40. *See also* NRPT comments at 3.

cost data, the Recommended Decision would have required this carrier to convert immediately to a proxy model, instead of using the proposed transition mechanism.<sup>766</sup> Tularosa Basin Tel. thus opposes using 1996 as the benchmark year because it began operations in 1996 and does not want to be forced to convert to a proxy mechanism before the transition period available to other qualifying rural carriers has ended. NRPT contends that when exchanges are bought in the middle of a calendar year, the additional loops should be reported as part of the acquiring company's cost study and the protected amount should be based on the acquiring company's annualized costs.<sup>767</sup>

194. Average Schedule Companies. Several commenters note that the Recommended Decision does not address how average schedule companies that convert to cost in 1997 will calculate their high cost support during the transition. Specifically, these commenters ask whether companies that receive only a partial year amount of universal service support payments for high loop costs will have their protected embedded universal service assistance per loop calculated on this partial year payment or will be allowed to annualize such payments to reflect a full year.<sup>768</sup> Wyoming PSC contends that protecting the high cost support at a level based on 1995 embedded costs is unfair because average schedule companies that are in the process of converting to cost would appear to be precluded from receiving support for embedded costs that they have incurred, even though these costs would have been recoverable under the current support mechanisms.<sup>769</sup> To address such concerns, USTA proposes that average schedule companies that convert to cost in 1997 be permitted to elect to use the proxy model or to use current costs as the basis for the protected support amount.<sup>770</sup> In addition, USTA suggests that average schedule companies that remain on average schedules should also be permitted to elect a cost proxy model or use the protected embedded cost amount that is calculated according to USTA's proposal.<sup>771</sup> Alternatively, Rock Hill Tel. Co. suggests that ILECs that convert from average schedule to cost in 1997 should receive support on an annualized basis during the transition period beginning January 1, 1998.<sup>772</sup> Rock Hill Tel. Co. explains that this proposal entails calculating such companies' transitional support as if they converted to "cost" status on January 1, 1997, and received an entire year of USF support.<sup>773</sup> Rock Hill Tel. Co. also contends

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<sup>766</sup> Tularosa Basin Tel. comments at 7.

<sup>767</sup> NRPT comments at 3. The term "annualized" refers to the projection of costs for a year based on an average of the costs incurred during a partial year.

<sup>768</sup> *See, e.g.*, John Staurulakis comments at 22; USTA comments at 26.

<sup>769</sup> Wyoming PSC reply comments at 2.

<sup>770</sup> USTA comments at 29.

<sup>771</sup> USTA comments at 29.

<sup>772</sup> Rock Hill Tel. Co. reply comments at 4.

<sup>773</sup> Rock Hill Tel. Co. reply comments at 4.

that average schedule ILECs that convert to cost at any time during the transition period should receive support for the remainder of that period based upon their actual embedded costs in order to ensure that both average schedule and cost rural ILECs are able to avail themselves of the transition process equally.<sup>774</sup>

195. Certification. AT&T contends that in order to prevent abuse, the Commission should not permit carrier self-certification and instead, should establish a formal process to verify a carrier's eligibility to receive support as a high cost rural carrier.<sup>775</sup> Contending that an accurate determination on eligibility is crucial, Time Warner supports AT&T's position and proposes that the Commission issue an NPRM or NOI regarding the certification process the rural carrier must undertake in order to receive support.<sup>776</sup> ALLTEL, however, asserts that AT&T's proposal subverts the authority the Act has given to state commissions to choose eligible carriers.<sup>777</sup> ALLTEL also contends that a formal certification process will result in an unjustifiable delay of a rural ILEC's certification.<sup>778</sup>

196. Support for Competitive Carriers. The majority of rural carriers object to providing high cost support to competitive carriers by making the support portable with the customer.<sup>779</sup> Commenters contend that although the Joint Board relies on the principle of competitive neutrality in making this recommendation, granting support to competitive carriers based on the ILECs' support actually would be contrary to the Act and not competitively neutral, because it would give preferential treatment to competitors through an uneconomic subsidy. Many commenters maintain that study area averaging causes an ILEC to receive the same amount of support for each customer in the study area regardless of the extreme differences in its cost of providing service to rural and urban areas. Thus, these commenters contend that making the support portable would permit wireless carriers and other CLECs to receive windfall support through their ability to "cream skim" customers in lower-cost areas, where their costs would be much less than the averaged, per-line support levels applicable to the rural telephone company's entire study area.<sup>780</sup> These competitors, some commenters assert, would provide high-quality service to lower cost customers by making expenditures for facilities only in the densely

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<sup>774</sup> Rock Hill Tel. Co. reply comments at 4.

<sup>775</sup> AT&T comments at 27.

<sup>776</sup> Time Warner reply comments at 23.

<sup>777</sup> ALLTEL reply comments at 5.

<sup>778</sup> ALLTEL reply comments at 5.

<sup>779</sup> See, e.g., Evans Tel. Co. comments at 12; ITC reply comments at 3; John Staurulakis comments at 7; Minnesota Coalition comments at 34; RT comments at 11; RTC comments at 15; TCA comments at 5; TDS Telecom comments at 41; Western Alliance comments at 14; Lufkin Conroe reply comments at 1;

<sup>780</sup> See, e.g., Evans Tel. Co. comments at 12; RTC comments at 15; Western Alliance comments at 14.

populated centers, while providing marginal service through resale in outlying areas.<sup>781</sup>

197. Several commenters state that the Joint Board's recommendation that the Commission require competitors to advertise in the entire study area, pursuant to section 254(e), in order to be eligible for support would not prevent cream skimming. They contend that wireless carriers and other CLECs might advertise in the entire service area but would construct facilities and aggressively market service only in the profitable lower cost areas.<sup>782</sup> Furthermore, commenters contend that CLECs would discourage subscribership in remote, high cost areas by providing marginal resold service.<sup>783</sup> Asserting that advertising in the entire area is not going to lead to an actual service request being made where signal strengths are inadequate, Evans Tel. Co. contends that the statutory standard requires the provision of service, rather than the advertising of services.<sup>784</sup> In addition, RTC states that the absence of a requirement that the CLEC price its resold services in the high cost area at a price likely to enable it to obtain business makes the advertising requirement insufficient, because a CLEC can keep expenditures for service to high cost areas low by maintaining high rates that ensure few customers.<sup>785</sup>

198. Evans Tel. Co. contends that providing high cost support to a CLEC for a resold service would give the CLEC an unfair competitive advantage because, as the operator of the facilities, the ILEC would continue to bear all of the cost of maintaining the facilities, while the reseller would merely purchase the service at a discount off the retail rate.<sup>786</sup> TDS Telecom thus maintains that the loss of only a few of the ILEC's high-volume, low-cost customers would increase the universal service burden that exists with respect to the ILEC's remaining higher cost customers.<sup>787</sup> Furthermore, Western Alliance predicts that making the support portable would discourage infrastructure investment by small, rural local exchange carriers.<sup>788</sup>

199. Advocating that rural areas should be exempt from any requirement to make support portable, Evans Tel. Co. maintains that the Act specifically provides advantages and protection to rural ILECs that are not available to potential competitors in their service areas.<sup>789</sup>

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<sup>781</sup> See, e.g., Evans Tel. Co. comments at 12; RTC comments at 15; Western Alliance comments at 14.

<sup>782</sup> See, e.g., Evans. Tel. Co. comments at 12; Western Alliance comments at 14.

<sup>783</sup> Western Alliance comments at 14. See also Evans. Tel. Co. comments at 12.

<sup>784</sup> Evans Tel. Co. comments at 12.

<sup>785</sup> RTC comments at 16.

<sup>786</sup> Evans Tel. Co. comments at 13. See also Minnesota Coalition comments at 34.

<sup>787</sup> TDS Telecom comments at 41.

<sup>788</sup> Western Alliance comments at 13.

<sup>789</sup> Evans Tel. Co. comments at 14.

Moreover, Evans. Tel. Co. states that subsidizing a single incumbent is not unfair, because it is unreasonable to support several service providers in a single service study area with a subsidy structure.<sup>790</sup> Lufkin-Conroe contends that the Commission, by making the support in rural areas portable, should not attempt to create artificial competition in areas where competition is not yet warranted by market forces.<sup>791</sup> Lufkin-Conroe further states that neither competition nor competitive neutrality requires or permits the Commission to favor new entrants over ILECs.<sup>792</sup> RTC contends that competitive neutrality requires that the Commission grant high cost support only to the provider who maintains the facilities and at the level of costs of the provider.<sup>793</sup> ITC suggests that the Commission should exempt rural areas from a requirement to make support portable as a means recognizing the risks that ILECs incur in fulfilling their vital obligations as carriers of last resort and equalizing the burdens between ILECs and new entrants.<sup>794</sup> Furthermore, John Staurulakis contends that the Commission cannot grant support to CLECs, because Congress granted only state commissions the authority to determine whether allowing more than one telecommunications carrier to provide service in a rural area is in the public interest.<sup>795</sup> John Staurulakis also asserts that the Commission should not make support portable in rural areas, because Congress has granted a presumption that rural carriers still operate in a natural monopoly for wireline service and recognize that facilities-based competition is inefficient in this type of market.<sup>796</sup>

200. Other commenters propose alternative methods for calculating the support that CLECs should receive during the transition. Minnesota Coalition asserts that CLECs should qualify for universal service support based on their actual costs.<sup>797</sup> RUS contends that because rural areas may not attract effective competition and because the competition may be directed toward lower cost subscribers within those areas, the Commission should establish a relationship between the amount of universal service support granted and the amount of investment carriers make in infrastructure.<sup>798</sup> RUS further suggests that if a carrier fails to make a certain level of

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<sup>790</sup> Evans Tel. Co. comments at 14.

<sup>791</sup> Lufkin Conroe reply comments at 1. *See also* Evans Tel. Co. comments at 14; Western Alliance comments at 11.

<sup>792</sup> Lufkin Conroe reply comments at 1. *See also* Evans Tel. Co. comments at 14; Western Alliance comments at 11.

<sup>793</sup> RTC comments at 16.

<sup>794</sup> ITC reply comments at 3.

<sup>795</sup> John Staurulakis comments at 7.

<sup>796</sup> John Staurulakis comments at 7.

<sup>797</sup> Minnesota Coalition comments at 35.

<sup>798</sup> RUS comments at 3.

investment, the support should be reduced to a level corresponding to actual investment, or, in some cases, additional investment should be required in order to qualify for support.<sup>799</sup> RTC contends that the law requires that support shall be used "only for the provision, maintenance, and upgrading of facilities" and that a CLEC reselling a loop should not get the high cost support for that loop. RTC maintains that since the resale rate for the loop is based on a supported retail price, the CLEC has itself paid a rate that includes universal service support.<sup>800</sup> TCA recommends that when a CLEC begins serving a rural study area, the defined serving area may continue to be the study area of the incumbent rural telephone company, but the portable support for access lines within the study area must vary based on the cost of providing the access lines.<sup>801</sup> GVNW and RT assert that in order to minimize cream skimming, the Commission should retain the current study areas and require CLECs to serve the entire study area.<sup>802</sup> In addition, RTC contends that instead of only disaggregating support, through the use of a smaller geographic area than a carrier's study areas, in a proxy model's cost calculation, the Commission should recognize that disaggregating support within rural company service areas is required by cost variances that result from the clustering and dispersion characteristics of the population distribution in small communities.<sup>803</sup> RTC and TDS also maintain that disaggregating support is necessary to prevent cream skimming by new entrants solely interested in serving the most lucrative pockets in rural areas.<sup>804</sup>

201. IXC's, wireless providers, and other potential competitors to ILEC's support the Joint Board's recommendation to grant support to CLEC's by making the support portable with a customer and based at the ILEC's level.<sup>805</sup> MFS asserts that support must be made available to any carrier that serves a high cost customer, because universal service should focus on affordable rates, not ensuring that carriers recover their investments.<sup>806</sup> Moreover, USTA recommends that support be portable, on the basis of a per-loop amount, for all eligible telecommunications carriers for the provision of service to single-line, primary residences, and single-line businesses.<sup>807</sup> GCI contends that ILEC proposals to impose carrier of last resort responsibilities, service quality standards, or service area requirements on CLEC's seeking to serve rural areas are

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<sup>799</sup> RUS comments at 3.

<sup>800</sup> RTC comments at 17.

<sup>801</sup> TCA comments at 5.

<sup>802</sup> GVNW comments at 8; RT comments at 11.

<sup>803</sup> RTC reply comments at 8.

<sup>804</sup> TDS Telecom comments at 11; RTC reply comments at 8.

<sup>805</sup> *See, e.g.*, WorldCom comments at 19; GCI reply comments at 2; MFS reply comments at 10.

<sup>806</sup> MFS reply comments at 10.

<sup>807</sup> USTA comments at 28.



contrary to the Act. GCI explains that section 214(e)(1) establishes the criteria for becoming an eligible telecommunications carrier, and Congress did not authorize the Commission to impose any other obligations.<sup>808</sup> Moreover, GCI asserts that basing the support granted to competitive carriers on the costs of the ILEC is competitively neutral. GCI explains that the purpose of section 254 is to ensure service is available through competition and supported where needed, not to keep the ILEC whole or to provide special considerations to rural companies facing competition.<sup>809</sup> GCI contends that making the support portable will constrain over-investment by incumbents and produce viable ILECs that will choose to continue to serve rural areas.<sup>810</sup>

202. Alaska and Insular Areas. Several commenters express support for the Joint Board's recommendation to allow rural carriers serving Alaska and insular areas to continue until further review to receive support based on their frozen historical benefits per line, rather than support based on a proxy model.<sup>811</sup> Alaska and Alaska PUC urge the Commission to reassess the per-line amount of support after any changes to access charges and separations rules to ensure that such changes do not reduce the amount of support a rural carrier in Alaska or an insular area receives, thereby jeopardizing the affordability of rates in those areas.<sup>812</sup>

203. While they support the Joint Board's recommended approach, Puerto Rico Tel. Co. and USTA suggest that the non-rural carriers serving Alaska and insular areas should also be exempt from having their support based on a proxy model. Puerto Rico Tel. Co. contends that treating rural carriers serving Alaska and insular areas differently than non-rural carriers serving those same areas is contrary to the plain language of the statute, which does not condition support for insular areas based on the carrier's status as a rural carrier.<sup>813</sup> USTA recommends that the exemption for rural carriers serving Alaska and insular areas should not be limited to carriers that meet the statutory definition of "rural" in section 153(37) of the Act, but should be expanded to include carriers serving those areas with less than two percent of the Nation's subscriber lines. USTA notes that Congress adopted the two percent standard in section 251(f)(2) of the Act to recognize the particular challenges smaller ILECs face.<sup>814</sup>

204. Other commenters, while supporting the Joint Board's recommendation, argue that rural carriers serving areas other than just Alaska and traditional insular areas should also

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<sup>808</sup> GCI reply comments at 3.

<sup>809</sup> GCI reply comments at 5.

<sup>810</sup> GCI reply comments at 5.

<sup>811</sup> *See, e.g.*, Alaska PUC comments at 2; GCI comments at 5-6; Alaska reply comments at 3.

<sup>812</sup> Alaska PUC comments at 2; Alaska reply comments at 3.

<sup>813</sup> Puerto Rico Tel. Co. comments at 20.

<sup>814</sup> USTA comments at 26.

continue to receive support based on frozen historical benefits per line for more than three years after a proxy model for non-rural ILECs is first used. John Staurulakis proposes that the Commission allow all rural carriers to continue using embedded costs as the basis for universal service support, past the three-year period recommended by the Joint Board.<sup>815</sup> Silver Star Tel. Co. and Harris recommend that the Commission establish criteria by which to designate rural carriers as serving an "insular" area.<sup>816</sup>

205. Guam Tel. Authority supports the Joint Board's proposal to freeze support based on historical per line amounts, but expresses concern that it might not be able to receive universal service support under that proposal due to its unique situation. Guam Tel. Authority explains that because of Guam's historical treatment as an international point, it has not filed a traditional access tariff, is not a member of NECA, does not serve a "study area" as defined by the Commission, and has not participated in any universal service support program.<sup>817</sup> Consequently, Guam Tel. Authority requests that the Commission interpret the Joint Board recommendation to allow it to receive benefits based on per-line amounts which Guam Tel. Authority received under its previous system of subsidies.<sup>818</sup>

#### **D. Competitive Bidding**

206. Many of the commenters agreed with the Joint Board's analysis and its recommendation that the Commission continue to explore the use of competitive bidding to set support levels.<sup>819</sup> These commenters agree with the Joint Board that competitive bidding can have significant advantages over other mechanisms to determine support levels. Airtouch and CSE Foundation note that a competitive bidding mechanism is market-based and allows the bidding carrier to determine its own costs for providing universal service to an area.<sup>820</sup> Ameritech, GSA, and GTE also support competitive bidding because it could serve to constrain or reduce the size of the support mechanism, particularly over time as new and more efficient technologies are developed.<sup>821</sup> AirTouch argues that the Commission could use the information on support levels developed from auctions to make adjustments to the support levels set by

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<sup>815</sup> John Staurulakis comments at 11.

<sup>816</sup> Harris comments at 9; Silver Star Tel. Co. comments at 3.

<sup>817</sup> Guam Tel. Authority comments at 1-2.

<sup>818</sup> *Id.* at 3-4.

<sup>819</sup> *See., e.g.*, APC comments at 6; CSE Foundation comments at 8; PCIA comments at 15; Motorola reply comments at 9.

<sup>820</sup> AirTouch comments at 24; CSE Foundation comments at 7.

<sup>821</sup> Ameritech comments at 13; GSA comments at 10; Sprint PCS comments at 6.

proxy models in non-competitive areas.<sup>822</sup> Several parties also argue that competitive bidding will require less administrative oversight by Federal and state regulators than other support mechanisms.<sup>823</sup> For example, Sprint PCS notes that while a proxy model system will require regulators to assess costs, competitive bidding requires no cost studies and no regulatory intervention beyond establishing and enforcing the bidding process rules.<sup>824</sup> GTE argues that competitive bidding is the only method for determining support that is inherently competitively neutral.<sup>825</sup>

207. CSE Foundation urges the Commission to evaluate the GTE proposal further.<sup>826</sup> GTE states that its proposal could be a starting point for further discussion of these issues.<sup>827</sup> GTE contends that its proposal is the only suggested support mechanism that is explicitly based on and clearly takes into account the benefits of competition, the gains from minimizing the cost of supplying service, and the costs to the economy of raising the necessary funding.<sup>828</sup> GTE states that therefore its proposal is the only one that directly addresses the "deadweight loss" concerns raised by AirTouch.<sup>829</sup> GTE argues that one aspect of its plan that has drawn much criticism -- a requirement that bidding carriers assume COLR requirements -- is necessary to make any competitive bidding system work, and notes that Ameritech agrees that an obligation to serve consistent with COLR requirements is necessary.<sup>830</sup> GTE therefore urges the Commission to define the service obligations on which the participants are bidding in an auction.<sup>831</sup> GTE suggests that parties be allowed to bid on per-subscriber support payments with the obligation to serve anyone requesting basic service in small (homogeneous) service areas.<sup>832</sup> Ameritech contends that parties should be allowed to bid on fixed-fee subsidies with the obligation to serve

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<sup>822</sup> AirTouch comments at 24-25.

<sup>823</sup> See GSA comments at 10; Motorola reply comments at 12.

<sup>824</sup> Sprint PCS comments at 6.

<sup>825</sup> GTE comments at 59.

<sup>826</sup> CSE Foundation comments at 8.

<sup>827</sup> GTE comments at 60.

<sup>828</sup> GTE reply comments at 42.

<sup>829</sup> GTE reply comments at 42 (*citing* AirTouch comments at 5-13.) AirTouch argues that tax burdens, such as the surcharge for universal service support mechanisms, lead to distortions in investment and supply decisions in the marketplace, which economists refer to as the "deadweight loss" of taxation. AirTouch comments at 5.

<sup>830</sup> GTE reply comments at 46 (*citing* Ameritech comments at 7).

<sup>831</sup> GTE reply comments at 46 (*citing* Ameritech comments at 7).

<sup>832</sup> Ex parte meeting on Universal Service Auctions, March 19, 1997.

any customer from the "COLR pool" that is randomly assigned to it.<sup>833</sup> Sprint PCS supports the adoption of a competitive bidding mechanism under which all eligible telecommunications carriers in an area can receive support set by the lowest bid, with the lowest bidder getting a "bonus" payment.<sup>834</sup> AirTouch states that the bidding process will likely require simultaneous multi-round auctions for service areas so that bidders can aggregate adjacent territories and therefore achieve economies of scope and scale.<sup>835</sup> GTE advocates a sealed bid auction process, whereby, the low bidder and other bidders within a specified range of the low bid will receive support equal to the highest accepted bid.<sup>836</sup> Ameritech also advocates a sealed bid auction, whereby the lowest bid wins and the second lowest bidder has an option to match. Under the Ameritech proposal, the total support amount would equal the amount of the lowest bid. Ameritech contends that if there is only one ILEC in a region, then support should be on a per-subscriber basis in order to provide an incentive to other carriers to serve the entire market. Ameritech contends that a fixed-fee subsidy levels the playing field between a COLR and a non-COLR. In the case of multiple COLRs, the second lowest bidder would have an option to match and receive a fixed share of the COLR market -- for example, the lowest bidder would receive 75% of the subsidy in return for 75% of obligation and the second lowest bidder would get 25% of the COLR market and 25% of the fixed-fee subsidy.<sup>837</sup>

208. GTE argues that the Commission needs to include a competitive bidding mechanism in the federal universal service support plan from the outset. The primary reason GTE cites is that any mechanism based on cost estimates, such as a proxy model, will set support levels incorrectly because errors in cost estimates are inevitable.<sup>838</sup> GTE also contends that it will be more difficult to alter the support levels through a competitive bidding process once the support levels developed through other mechanisms become entrenched.<sup>839</sup> To that end, GTE recommends that the Commission issue a Further Notice of Proposed Rule Making in this proceeding to build upon the existing public record on the specifics of a workable competitive bidding mechanism.<sup>840</sup> AirTouch, on the other hand, states that the issues involved in developing a competitive bidding mechanism are sufficiently complex that they should be

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<sup>833</sup> Ex parte meeting on Universal Service Auctions, March 19, 1997.

<sup>834</sup> Sprint PCS comments at 7 (*citing* NPRM at para. 36).

<sup>835</sup> AirTouch comments at 24.

<sup>836</sup> Ex parte meeting on Universal Service Auctions, March 19, 1997.

<sup>837</sup> Ex parte meeting on Universal Service Auctions, March 19, 1997.

<sup>838</sup> GTE comments at 60.

<sup>839</sup> GTE comments at 61.

<sup>840</sup> GTE reply comments at 43, 46-47.

addressed in a separate proceeding.<sup>841</sup>

209. Other commenters, however, oppose using competitive bidding to set support levels. Minnesota Coalition, RTC, and TDS Telecom argue that use of competitive bidding would violate the Act. They argue that basing support levels on the lowest bidder would not provide the "sufficient" and "predictable" support required by section 254(d).<sup>842</sup> Minnesota Coalition argues that the prospect of recurring reductions in support levels due to periodic reductions would make rural ILECs decisions to invest in infrastructure even more hazardous than use of a forward-looking cost methodology, and that such a risk is inconsistent with the Act's requirement that funding be predictable.<sup>843</sup> TDS Telecom states that determining what support competing ILECs will receive based on the lowest bid would deny "sufficient" support to the other bidders.<sup>844</sup> RTC contends that use of competitive bidding is also at odds with the Act's emphasis on quality services. It states that bidding will lead to a "race to the bottom" in regards to the quality of service, since the winning bidder would be the carrier that intends to commit the least amount of resources to providing service.<sup>845</sup> RTC also argues that the Commission does not have the authority to compel states to use competitive bidding since the Act gives the states the authority to designate eligible carriers.<sup>846</sup>

210. Several commenters argue that competitive bidding should not be adopted to establish universal service support since it would only work in areas where there are competing carriers.<sup>847</sup> Minnesota Coalition argues that there will likely not be competing carriers in rural areas, particularly since section 214(e)(2) does not presume that there will be multiple eligible telecommunications carriers in areas served by rural telephone companies.<sup>848</sup> AT&T and

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<sup>841</sup> AirTouch comments at 24.

<sup>842</sup> Minnesota Coalition comments at 27-28; RTC comments at 22-23; TDS Telecom comments at 43-44.

<sup>843</sup> Minnesota Coalition comments at 29.

<sup>844</sup> TDS Telecom comments at 44.

<sup>845</sup> RTC comments at 22 (*citing* 47 U.S.C. § 254(b)(1)); RTC reply comments at 20-21.

<sup>846</sup> RTC comments at 22 (*citing* 47 U.S.C. 214(e)).

<sup>847</sup> *See* CNMI comments at 38; Minnesota Coalition comments at 27; WorldCom comments at 22.

<sup>848</sup> Minnesota Coalition comments at 27 (*citing* section 214(e)(2)):

Upon request and consistent with the public interest, convenience, and necessity, the State commission *may*, in the case of an area served by a rural telephone company, and *shall* in the case of other areas, designate more than one carrier as an eligible telecommunications carrier. . . . Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the State shall find that the designation is in the public interest.

47 U.S.C. § 214(e)(2) (emphasis added)).

Teleport argue that using competitive bidding would be complex and expensive to administer.<sup>849</sup> They also argue that GTE's proposal is anti-competitive because the ILEC would receive support automatically while a competing carrier must participate in an auction to be eligible for support.<sup>850</sup>

211. In its reply comments, the City of Chicago disagrees with RTC that competitive bidding is in conflict with the Act. It argues that competitive bidding follows the goals of the Act by utilizing competitive forces to the maximum extent possible to provide service, and that it represents a close approximation of the conditions where competitive neutrality would prevail.<sup>851</sup> Chicago also argues that it is unreasonable to assume that there will not be quality of service standards associated with the provision of universal service, and therefore RTC's concerns about the quality of service under a competitive bidding system are unfounded.<sup>852</sup> GTE states that its proposal considers that competition will develop in different markets at different times by not requiring an auction to set support levels until a new entrant seeks to receive universal support payments.<sup>853</sup> GTE also states that its proposal is no more of a barrier to entry than the bidding process that goes on every day in competitive markets.<sup>854</sup>

## **VIII. SUPPORT FOR LOW-INCOME CONSUMERS**

### **A. Overview**

212. The following is a summary of the comments relating to support for low-income consumers.

### **B. Authority to Revise Lifeline and Link Up Programs**

#### **1. Comments**

213. Georgia PSC contends that while the Commission may have authority separate from section 254 to modify the Lifeline program, it should heed the "clear statement from Congress" in section 254(j) that no change was intended.<sup>855</sup> BellSouth asserts that section 254

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<sup>849</sup> AT&T reply comments at 9-10; Teleport reply comments, att. at 2.

<sup>850</sup> AT&T reply comments at 9; Teleport reply comments, att. at 1.

<sup>851</sup> Chicago reply comments at 17-18.

<sup>852</sup> Chicago reply comments at 17.

<sup>853</sup> GTE reply comments at 42.

<sup>854</sup> GTE comments at 63.

<sup>855</sup> Georgia PSC reply comments at 19.

contemplates distinct federal and state low-income support funds and does not evidence any congressional intent to transfer to the interstate jurisdiction full responsibility for Lifeline.<sup>856</sup> Furthermore, BellSouth contends that Congress did not intend for section 254 to affect Lifeline.<sup>857</sup> Bell Atlantic asserts that states should prescribe the specific services that will help maintain subscribership among low-income consumers. Bell Atlantic argues that because most of the Joint Board's proposals affect local services and under the Act states retain exclusive jurisdiction over intrastate services, the Commission lawfully may not adopt mechanisms that affect the provision of local service.<sup>858</sup>

## **C. Changes to Structure of Lifeline and Link Up**

### **1. Comments**

#### **a. Lifeline**

214. Expanding Lifeline to Low-Income Consumers Nationwide. Several commenters agree with the Joint Board that all eligible telecommunications carriers should be required to offer Lifeline so that the program is available to as many low-income consumers as possible.<sup>859</sup> With respect to the Joint Board's recommendation that in order to be eligible for universal service support a carrier must offer Lifeline, TURN asks the Commission to clarify that a carrier that provides Lifeline pursuant to a state program is considered eligible for support pursuant to section 214(e)(1).<sup>860</sup> TURN is concerned that a carrier offering Lifeline in accordance with California's rules, which do not require verification of customer eligibility, could be denied federal universal service support.<sup>861</sup>

215. Many commenters support the Joint Board's recommendation to eliminate the state matching requirement and make Lifeline available in every state.<sup>862</sup> CNMI asserts that conditioning the availability of Lifeline on state participation would violate section 254(b)(3)'s

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<sup>856</sup> BellSouth comments at 18.

<sup>857</sup> BellSouth comments at 18.

<sup>858</sup> Bell Atlantic comments at 18.

<sup>859</sup> *See, e.g.*, New York DPS comments at 11; SBC comments at 6; Universal Service Alliance comments at 13-14.

<sup>860</sup> TURN comments at 4.

<sup>861</sup> TURN comments at 4.

<sup>862</sup> *See, e.g.*, AT&T comments at 15; Catholic Conference comments at 9; Citizens Utilities comments at 19; CNMI comments at 29; DC OPC comments at 2; Florida PSC comments at 5-7; GTE comments at 85; Kansas CC comments at 2; NASUCA comments at 11; NCTA comments at 15; New Jersey Advocate comments at 6; TURN comments at 3; Universal Service Alliance comments at 13; CPI reply comments at 18.

requirement that consumers in all regions of the nation should have access to affordable telecommunications services.<sup>863</sup>

216. Some commenters contend that further evidence of Lifeline's effect on subscription levels is needed before expanding Lifeline to every state, especially in light of the potential increase in the size of the federal funding mechanisms.<sup>864</sup> For example, Georgia PSC and Kansas CC, emphasizing that low-income support programs must be targeted to increase subscribership, urge the Commission to compare subscription levels in states that participate in Lifeline and those that do not.<sup>865</sup> Additionally, Georgia PSC and New York DPS recommend that the Commission examine the role of other assistance programs available to low-income consumers in non-participating states in deciding whether to expand Lifeline to every state.<sup>866</sup> Georgia PSC further asserts that low-income support programs must be evaluated for their cost effectiveness and efficiency before being adopted.<sup>867</sup>

217. Florida PSC questions whether the Joint Board's recommendation to require states to provide matching funds in order to receive support beyond the federal baseline amount, rather than requiring companies to do so by way of their rate-making process, would cause states to discontinue participation in Lifeline because of the necessity of establishing a funding mechanism for the program.<sup>868</sup> Florida PSC believes that it will be necessary for states to establish universal service funding mechanisms for Lifeline rather than requiring companies to fund the state's portion of Lifeline through their rates.<sup>869</sup>

218. Georgia PSC contends that the Commission should not attempt to mandate "whether and how the states participate in the Lifeline program" and asserts that states increasingly are establishing their own explicit universal service funding mechanisms.<sup>870</sup> SNET, noting that the 1996 Act does not require that Lifeline and Link Up be amended, urges the Commission not to amend these programs but instead to allow the states to develop their own

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<sup>863</sup> CNMI comments at 30.

<sup>864</sup> *See, e.g.*, New York DPS comments at 14; USTA comments at 33; Georgia PSC reply comments at 17.

<sup>865</sup> Kansas CC comments at 4; Georgia PSC reply comments at 17.

<sup>866</sup> New York DPS comments at 15; Georgia PSC reply comments at 17.

<sup>867</sup> Georgia PSC reply comments at 21 (also emphasizing that low-income programs should be subject to regular review to ensure that they meet these criteria).

<sup>868</sup> Florida PSC comments at 6.

<sup>869</sup> Florida PSC comments at 6-7.

<sup>870</sup> Georgia PSC reply comments at 20.



low-income support programs.<sup>871</sup> BellSouth suggests that the Commission should review Lifeline after it promulgates its universal service rules, at which time it can assess the extent to which Lifeline should be modified.<sup>872</sup>

219. Lifeline Support Amount. Many commenters support the Joint Board's recommendation to increase the federal Lifeline support amount to a \$5.25 baseline level, with the potential for state matching, for a maximum federal support amount of \$7.00.<sup>873</sup> DC OPC maintains that expanding Lifeline to all states and increasing the federal baseline support to \$5.25 per eligible subscriber ensures that all consumers, even in states without a matching contribution, receive adequate Lifeline assistance.<sup>874</sup> NCTA asserts that the Joint Board's proposed support levels achieve the Joint Board's twin goals of extending Lifeline to every state and maximizing states' incentives to continue generating matching support.<sup>875</sup> Furthermore, Sprint contends that an increased federal support amount is especially necessary as basic local service rates move closer to cost due to rate rebalancing, access charge reform, and changes in universal service policy.<sup>876</sup>

220. Florida PSC is confident that states currently participating in Lifeline will continue to do so if the Commission expands Lifeline to every state and eliminates the matching requirement, but Florida PSC is skeptical about whether currently non-participating states will provide matching support.<sup>877</sup> Other commenters are concerned that increasing the federal support amount may result in states' reducing their matching contributions.<sup>878</sup> NYNEX, CPI, and SBC therefore maintain that the Commission should decline to increase support beyond the current \$3.50 in currently participating states that reduce their matching support below existing levels.<sup>879</sup> While it maintains that this proposal would reduce a state's incentive to decrease its

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<sup>871</sup> SNET comments at 7-8.

<sup>872</sup> BellSouth reply comments at 11.

<sup>873</sup> See, e.g., Catholic Conference comments at 9; DC OPC comments at 2; Florida PSC comments at 2; NASUCA comments at 11; NCTA comments at 16; NYNEX comments at 9; Ohio PUC comments at 12; Washington UTC comments at 10-11 (but suggesting that the federal support amount may need to be modified in the future and that the Commission should continue to work with the states to monitor subscribership); CPI reply comments at 18.

<sup>874</sup> DC OPC comments at 2.

<sup>875</sup> NCTA comments at 16.

<sup>876</sup> Sprint reply comments at 6-7.

<sup>877</sup> Florida PSC comments at 6-7.

<sup>878</sup> CPI comments at 4; NYNEX comments at 9.

<sup>879</sup> CPI comments at 4; NYNEX comments at 9 (specifying that this should be true provided that the combined state and federal support does not exceed the lowest monthly state rate for local telephone service, including the

support amount, CPI points out that it also might "place the low-income consumer in the midst of a game of 'chicken' between the FCC and the state commissions or legislatures."<sup>880</sup> CPI also suggests that we set the federal support amount at a rate that is a percentage of the lower of prevailing rates or the national average rate and provide additional support only if a state maintains its matching contribution.<sup>881</sup> Oregon PUC, on the other hand, maintains that the federal support amount should be the same for every state, regardless of whether a previously-participating state ceases to participate in Lifeline.<sup>882</sup>

221. Kansas CC suggests that the entire amount of federal funding should be conditioned on state participation in Lifeline.<sup>883</sup> Thus, Kansas CC suggests that for every \$1.00 of state funding, federal support mechanisms should provide \$2.00, not to exceed \$7.00 in federal support.<sup>884</sup> Kansas CC maintains that federal support mechanisms doubling the state contribution "would further strengthen the incentive of states to participate in the program, while ensuring that universal service is not disproportionately funded by the federal jurisdiction."<sup>885</sup> United Utilities, on the other hand, argues that the telecommunications carrier serving qualifying low-income consumers should receive \$7.00 in federal support regardless of whether a state provides matching funds, because the state in which consumers reside should not determine whether they can receive the full amount of Lifeline support.<sup>886</sup> Colorado PUC cautions the Commission to monitor the low-income support programs closely in order to avoid unintended expansion of the support mechanisms.<sup>887</sup>

222. Several commenters<sup>888</sup> address the question posed in the Recommended Decision Public Notice: "How can the FCC avoid the unintended consequence that the increased federal support amount has no direct effect on Lifeline subscribers' rates in many populous states with

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interstate SLC); SBC reply comments at 14. CPI suggests, however, that there would be an exception for states, such as New York, whose existing contributions are larger than the federal contribution.

<sup>880</sup> CPI comments at 5.

<sup>881</sup> CPI comments at 6. *See also* California Dept. of Consumer Affairs reply comments at 7-8 (endorsing CPI's proposal).

<sup>882</sup> Oregon PUC comments at 4.

<sup>883</sup> Kansas CC comments at 3.

<sup>884</sup> Kansas CC comments at 3-4.

<sup>885</sup> Kansas CC comments at 3.

<sup>886</sup> United Utilities comments at 4.

<sup>887</sup> Colorado PUC reply comments at 3.

<sup>888</sup> *See, e.g.,* California PUC comments at 11; CPI comments at 3-6; MCI comments at 13-14.

Lifeline programs, and instead results only in a larger percentage of the total support being generated from federal sources?"<sup>889</sup> California PUC and Citizens Utilities argue that the Joint Board's recommendation to expand Lifeline to every state and increase the federal support amount without requiring funding by the states will increase the size of the federal support mechanisms unduly and may simply shift the burden of supporting low-income consumers from the state to the federal jurisdiction.<sup>890</sup> California PUC maintains that the proposed increased federal support amount would not benefit California's low-income consumers because California imposes a statewide Lifeline rate on all LECs; it asserts that increasing the federal support amount merely may result in a reduction in state funding to account for the increased funding from the federal jurisdiction.<sup>891</sup> Washington UTC, on the other hand, is confident that the \$7.00 cap on the federal support amount will guard against excessive support being generated from federal sources.<sup>892</sup> Citizens Utilities suggests that every state should receive \$3.50 in federal support per qualifying subscriber, plus additional funding equal to the amount provided by the state, for a maximum of \$5.25 in federal funds. If a state chooses not to fund all or any of the \$1.75 per qualifying subscriber, Citizens Utilities suggests that federal support would be reduced proportionately to the \$3.50 minimum of federal support.<sup>893</sup>

223. CPI and MCI note that the potential "unintended consequence" of an increased federal support amount having no direct effect on Lifeline subscribers' rates and instead resulting only in a larger percentage of the total support being generated from federal sources, may occur in states that already mandate relatively low Lifeline rates.<sup>894</sup> CPI therefore suggests that the Commission should "limit the federal contribution [in states with low Lifeline rates] so that the price of phone service is not less than zero;"<sup>895</sup> or, in other words, the support amount should not exceed the non-Lifeline rate, which would result in a windfall for carriers. MCI asserts that any changes in Lifeline should be directed toward low-income consumers in states currently without Lifeline.<sup>896</sup> CPI emphasizes that an increased federal support amount might be more effective if, for example, Lifeline enrollment is made automatic, thereby increasing the number of people receiving Lifeline.<sup>897</sup>

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<sup>889</sup> Recommended Decision Public Notice at 1.

<sup>890</sup> California PUC comments at 10; Citizens Utilities comments at 19.

<sup>891</sup> California PUC comments at 11.

<sup>892</sup> Washington UTC comments at 12.

<sup>893</sup> Citizens Utilities comments at 19-20.

<sup>894</sup> CPI comments at 3-4 (*citing* New York's Lifeline rate of only \$1.00); MCI comments at 13-14.

<sup>895</sup> CPI comments at 3.

<sup>896</sup> MCI comments at 14.

<sup>897</sup> CPI comments at 4, n.3.

224. Some commenters contend that the federal support amount recommended by the Joint Board may be inadequate.<sup>898</sup> Some of these commenters maintain that in making a final determination on the federal support amount, the Commission should evaluate states' telephone rates, economic status, and other state-specific factors.<sup>899</sup> For example, Puerto Rico Tel. Co. maintains that in Puerto Rico, \$5.25 in federal support is inadequate because, monthly rates could reach \$30.00, and the median income level is low compared to the national median income level.<sup>900</sup> Vermont PSB, questioning whether the federal support amount would be adequate for low-income consumers living in high cost areas, argues, along with Puerto Rico Tel. Co., that this will depend on the Commission's high cost rules, competition, and access charge reform.<sup>901</sup> Vermont PSB maintains that the proposed federal support amount will be helpful to Lifeline consumers only if support for high cost, rural, and insular areas is sufficient to at least offset potential increases in rates resulting from competition and access charge reform.<sup>902</sup> Wyoming PSC, which also is concerned about the sufficiency of the proposed Lifeline support amount in high cost areas, maintains that the Commission should examine states' underlying costs of providing telephone service, as well as the availability of other state funds that could provide assistance.<sup>903</sup>

225. CPI proposes that the Commission mandate more federal Lifeline support for low-income consumers living in areas with the highest rates.<sup>904</sup> CPI claims that the proposed federal support amount of \$5.25 will reduce the rates for low-income consumers to an average of \$12.75, which it believes is unaffordable.<sup>905</sup> CPI therefore suggests that the Commission set the federal Lifeline support amount at half of the national average rate, or half of the prevailing rate, for the designated services, whichever is lower.<sup>906</sup> Thus, using a national average rate of approximately \$18.00 (\$14.50 plus the SLC), the resulting rate for Lifeline subscribers would be \$9.00. In areas where the prevailing rate is lower than the national average, the discount would

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<sup>898</sup> See, e.g., CPI comments at 2; ITC comments at 7; Puerto Rico Tel. Co. comments at 15; South Carolina comments at 14-15.

<sup>899</sup> See, e.g., CPI comments at 2-3; Puerto Rico Tel. Co. comments at 15; South Carolina comments at 14-15; Vermont PSB comments at 11; Wyoming PSC comments at 10.

<sup>900</sup> Puerto Rico Tel. Co. comments at 15-16.

<sup>901</sup> Puerto Rico Tel. Co. comments at 15; Vermont PSB comments at 11-12.

<sup>902</sup> Vermont PSB comments at 12.

<sup>903</sup> Wyoming PSC comments at 10.

<sup>904</sup> CPI comments at 2-3.

<sup>905</sup> CPI comments at 2.

<sup>906</sup> CPI comments at 1.

be proportionately smaller.<sup>907</sup> Similarly, ITC recommends that the Commission should determine an affordable Lifeline rate and set the federal support amount accordingly.<sup>908</sup> Alternatively, ITC recommends either: (1) establishing a capped level of local service revenue per line and then providing a fixed amount of support; or (2) determining support as a percentage of the total rate for local service.<sup>909</sup>

226. Several commenters assert that the federal Lifeline support amount should not be increased absent further analysis demonstrating that such a change will have a significant impact on subscribership levels among low-income consumers.<sup>910</sup> A number of carriers and two state commissions argue that the main reason customers lose access to telecommunications service is for failure to pay toll bills, rather than because of unaffordable local rates.<sup>911</sup> They contend that increasing the federal support amount to \$5.25 in every state may increase the overall size of the universal service support mechanisms without increasing subscribership to the same degree as, for example, mandating the availability of toll blocking for low-income consumers.<sup>912</sup> AT&T therefore suggests that the current \$3.50 federal support amount should be extended to all states for two to three years, at which time the Commission should assess whether other measures recommended by the Joint Board, such as toll limitation and no disconnection of local service for non-payment of toll charges, have resulted in a more substantial impact on subscribership.<sup>913</sup> Colorado PUC also suggests that the Commission should monitor the degree to which subscribership levels are affected by mechanisms besides increased Lifeline support, such as no disconnect for non-payment of toll charges.<sup>914</sup> Georgia PSC argues that the Commission should examine pre-paid phone cards, wireless service, and toll-limitation services before increasing the support amount.<sup>915</sup> SBC recommends that, in the absence of evidence supporting an increased federal support amount, federal support should remain at \$3.50 and match dollar-for-dollar any

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<sup>907</sup> CPI comments at 1.

<sup>908</sup> ITC comments at 7.

<sup>909</sup> ITC comments at 7.

<sup>910</sup> *See, e.g.*, AT&T comments at 15; Centennial comments at 11-12 (arguing that Washington, D.C. offers low telephone rates to low-income consumers, but its subscribership levels have remained flat); Fred Williamson comments at 4; MCI comments at 13; MFS comments at 28; New York DPS comments at 15; SBC comments at 7-8; USTA comments at 33; ACTA reply comments at 4; Georgia PSC reply comments at 17.

<sup>911</sup> AT&T comments at 16; MFS comments at 28; SBC comments at 7; Chicago reply comments at 7; Georgia PSC reply comments at 18.

<sup>912</sup> AT&T comments at 16; MFS comments at 28; SBC comments at 7; Georgia PSC reply comments at 18.

<sup>913</sup> AT&T comments at 16.

<sup>914</sup> Colorado PUC reply comments at 2.

<sup>915</sup> Georgia PSC reply comments at 19.

state contribution over \$3.50, with a maximum of \$7.00 in federal support.<sup>916</sup> Additionally, New Jersey Advocate suggests that lower rates will not increase subscribership among low-income consumers in states such as New Jersey, in which small local calling areas result in toll charges being the main reason subscribers lose access to telecommunications services, rather than unaffordable local rates.<sup>917</sup> Finally, BellSouth argues that federal support cannot exceed the amount of the SLC, because the local rate includes no other federal charge that can be waived.<sup>918</sup>

227. Making Lifeline Competitively Neutral. Many commenters support the Joint Board's recommendation to make Lifeline competitively neutral by requiring all interstate telecommunications carriers to contribute to low-income universal service support mechanisms and by allowing all eligible carriers to receive support.<sup>919</sup> AT&T and Sprint, for example, concur with the Joint Board that requiring all interstate telecommunications carriers to contribute would make the program competitively neutral and more consistent with the principles enumerated in section 254.<sup>920</sup> AT&T emphasizes, however, that a carrier offering Lifeline must offer: (1) the rate for that service less the full amount of the subsidy, so there is no windfall to the carrier; and (2) the local service that best meets customers' needs.<sup>921</sup> Sprint notes that requiring all interstate telecommunications carriers to contribute will help move interstate access rates closer to their economic cost and thus reduce some of the pricing distortions and incorrect market entry signals caused by implicit subsidies.<sup>922</sup>

228. California PUC submits that all carriers, not just eligible telecommunications carriers as defined in section 214(e)(1), should be able to receive support from universal service support mechanisms for providing Lifeline.<sup>923</sup> It asserts that, while the requirements for becoming an eligible carrier may be suitable for carriers seeking high cost support, they are inappropriate when applied to low-income programs.<sup>924</sup> California PUC maintains that,

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<sup>916</sup> SBC comments at 8. *See also* Georgia PSC reply comments at 20 (supporting SBC's proposal if the Commission decides to change the current federal universal service support mechanisms).

<sup>917</sup> New Jersey Advocate comments at 4.

<sup>918</sup> BellSouth comments at 18.

<sup>919</sup> *See, e.g.,* AT&T comments at 15; California PUC comments at 10; MCI comments at 12; New York DPS comments at 13-14; North Dakota PSC comments at 2; Ohio PUC comments at 13; Sprint comments at 4; Washington UTC comments at 11; WorldCom comments at 22-23.

<sup>920</sup> AT&T comments at 15; Sprint comments at 4.

<sup>921</sup> AT&T comments at 16-17, n.12.

<sup>922</sup> Sprint comments at 4.

<sup>923</sup> California PUC comments at 12.

<sup>924</sup> California PUC comments at 12.

depending on the relationship between costs and the benchmark, eligible-carrier status may be irrelevant in urban areas where carriers do not seek high cost support.<sup>925</sup> BANX, on the other hand, contends that the Commission should reject California PUC's proposal to provide low-income universal service support to non-eligible telecommunications carriers.<sup>926</sup>

229. California PUC, TURN, and California Dept. of Consumer Affairs assert that the Joint Board's recommendation to prohibit carriers operating on a purely resale basis from becoming eligible carriers will inhibit competition to serve low-income consumers.<sup>927</sup> TURN argues that resellers should be eligible to provide Lifeline so that resellers' customers are able to receive Lifeline.<sup>928</sup> TURN offers two suggestions for achieving these objectives: (1) require LECs to offer wholesale Lifeline service (with appropriate wholesale discounts based on avoided costs) to resellers and receive support from universal service support mechanisms; or (2) permit resellers to provide Lifeline and receive support for doing so.<sup>929</sup> California PUC supports both of the approaches suggested by TURN.<sup>930</sup> CPI states that nothing precludes resellers from participating in Lifeline.<sup>931</sup>

230. Robert J. Lock argues that the Commission should reform existing programs and create opportunities and incentives for all carriers, including wireless providers, to serve low-income individuals.<sup>932</sup> He asserts that regulatory barriers that deny wireless providers the opportunity to offer Lifeline and Link Up eliminate any incentive for these carriers to compete to serve low-income consumers.<sup>933</sup>

231. WinStar contends that competitive neutrality would not be advanced if the Commission denies universal service support to carriers, such as wireless providers, that are technically incapable of offering Lifeline to certain customers or areas.<sup>934</sup> WinStar maintains

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<sup>925</sup> California PUC comments at 12-13.

<sup>926</sup> BANX reply comments at 18.

<sup>927</sup> California PUC comments at 12; TURN comments at 6; California Dept. of Consumer Affairs reply comments at 5.

<sup>928</sup> TURN comments at 7.

<sup>929</sup> TURN comments at 7.

<sup>930</sup> California PUC reply comments at 5-6.

<sup>931</sup> CPI reply comments at 14-15.

<sup>932</sup> Robert J. Lock comments at 27.

<sup>933</sup> Robert J. Lock comments at 28-29.

<sup>934</sup> WinStar comments at 4, 12-13.

that because of its 38 GHz technology, it will be unable to reach many low-income consumers living in urban areas whose access to WinStar's network is blocked by buildings or other obstructions.<sup>935</sup>

232. Several commenters support the Joint Board's recommendation to break the link between federal Lifeline support and the SLC so that carriers that do not charge SLCs may offer Lifeline rates and receive Lifeline support.<sup>936</sup> BellSouth, however, disagrees with the Joint Board and asserts that federal Lifeline support should remain tied to the interstate charges paid by end users, which is presently the SLC.<sup>937</sup> It further states that if the Commission adopts an end user surcharge as a recovery mechanism for universal service support contributions, such surcharges could also be included in the federal baseline amount supported for Lifeline customers.<sup>938</sup>

233. Customer Qualification to Receive Lifeline Service. AT&T and Washington UTC agree with the Joint Board that the states should specify customer qualification criteria for Lifeline.<sup>939</sup> Additionally, several commenters support the Joint Board's recommendation that Lifeline eligibility should be based solely on income or factors directly related to income, such as enrollment in low-income assistance programs.<sup>940</sup> Benton and Edgemont jointly suggest that the criteria in all states be participation in a federal means-tested assistance program by any member of a household.<sup>941</sup> Specifically, Benton and Edgemont suggest that Lifeline enrollment be automatic based on participation in Medicaid, food stamps, Supplemental Security Income, public housing assistance and Section 8,<sup>942</sup> Low-Income Home Energy Assistance Program (LIHEAP), or the school lunch program.<sup>943</sup> In light of the recent restructuring of the welfare system, Benton and Edgemont also propose that recipients of an Earned Income Tax Credit be

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<sup>935</sup> WinStar comments at 12-13.

<sup>936</sup> See, e.g., MFS Communications comments at 29; New York DPS comments at 14; Sprint comments at 4; WorldCom comments at 22-23.

<sup>937</sup> BellSouth comments at 18.

<sup>938</sup> BellSouth comments at 18.

<sup>939</sup> AT&T comments at 17; Washington UTC comments at 11-12.

<sup>940</sup> See, e.g., AT&T comments at 17; California PUC comments at 13; GTE comments at 85; USTA comments at 33; Washington UTC comments at 12.

<sup>941</sup> Letter from Ellis Jacobs, Edgemont, and Kevin Taglang, Benton, to William F. Caton, dated February 21, 1997 (Benton and Edgemont February 21 *ex parte*).

<sup>942</sup> Section 8 is a federal housing assistance program administered by the Department of Housing and Urban Development.

<sup>943</sup> Benton and Edgemont February 21 *ex parte*.



automatically enrolled in Lifeline.<sup>944</sup> Catholic Conference, however, advises the Commission not to adopt the Joint Board's suggestion to base qualification on enrollment in low-income assistance programs because of the recently-enacted welfare reform law.<sup>945</sup> Catholic Conference asserts that, because the new law places greater restrictions on qualification for certain low-income assistance programs, the Commission would thwart the Joint Board's goal of increasing subscribership among low-income consumers if it based Lifeline qualification on participation in state-administered welfare programs.<sup>946</sup> Catholic Conference therefore suggests that the Commission should impose a federal qualification rule that could be based on income and adjusted by state.<sup>947</sup>

234. USTA and AT&T assert that the Commission should require states to verify customers' qualifications and prohibit self-certification in order to receive federal support.<sup>948</sup> Furthermore, California Dept. of Consumer Affairs maintains that, while California's policy of permitting consumers to self-certify that they qualify for Lifeline initially may have been necessary and appropriate in order to encourage Lifeline participation, the additional incentive to apply is no longer necessary now that the Lifeline is widely subscribed to.<sup>949</sup> California Dept. of Consumer Affairs suggests that if the Commission decides to require verification of Lifeline eligibility, there should be a transition period in which California could make the changes necessary to comply with this requirement.<sup>950</sup> California Dept. of Consumer Affairs further notes that the California PUC has directed its staff to investigate the possibility of requiring income verification.<sup>951</sup>

235. California PUC and TURN, on the other hand, urge the Commission to continue to permit California to allow self-certification and in turn receive a reduced level of federal support, although California PUC acknowledges that it is exploring the prospect of implementing a verification program.<sup>952</sup> Similarly, Universal Service Alliance avers that states should have the discretion to use either self-certification or income verification in determining

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<sup>944</sup> Benton and Edgemont February 21 *ex parte*.

<sup>945</sup> Catholic Conference comments at 9-10, *citing* The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L. 104-193 (1996).

<sup>946</sup> Catholic Conference comments at 9-10.

<sup>947</sup> Catholic Conference comments at 10.

<sup>948</sup> AT&T comments at 17; USTA comments at 33.

<sup>949</sup> California Dept. of Consumer Affairs reply comments at 6-7.

<sup>950</sup> California Dept. of Consumer Affairs reply comments at 6-7.

<sup>951</sup> California Dept. of Consumer Affairs reply comments at 6-7.

<sup>952</sup> California PUC comments at 11; TURN comments at 3.

customer eligibility, based on the asserted success of self-certification in California.<sup>953</sup>

236. CPI recommends that the Commission should make Lifeline enrollment automatic, matching welfare recipient lists against telephone bills so that individuals receiving low-income assistance would automatically be enrolled in Lifeline.<sup>954</sup> As New York DPS explains, such a procedure has been implemented in New York, where NYNEX receives qualification information from the New York Department of Social Services (NYDSS) and the New York City Community Development Agency (NYCDA).<sup>955</sup> This information is used to enroll customers in the program automatically and also ensure that individuals stop receiving Lifeline service if they no longer qualify.

## **b. Link Up**

237. Several commenters support the Joint Board's recommendation that Link Up should be removed from the jurisdictional separations rules and made competitively neutral, with support coming from the new universal service support mechanisms.<sup>956</sup> Additionally, Ohio PUC agrees with the Joint Board that the amount of Link Up support should remain unchanged.<sup>957</sup> Edgemont, on the other hand, contends that in order to increase subscribership, the Commission should completely eliminate service connection charges.<sup>958</sup> New Jersey Advocate also suggests that if they elect to receive toll limitation, Lifeline customers should not have to pay any service connection charges.<sup>959</sup>

238. Catholic Conference and Robert J. Lock support the Joint Board's recommendation to prohibit states from restricting the number of service connections per year for which eligible low-income consumers can receive support.<sup>960</sup> These parties maintain that such a policy is vital for migrant farmworkers and other low-income consumers who frequently change residences.<sup>961</sup> Robert J. Lock, however, notes that in not placing restrictions on the

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<sup>953</sup> Universal Service Alliance comments at 14.

<sup>954</sup> CPI comments at 4, n.3.

<sup>955</sup> Memo from Terry Monroe, New York DPS, to Chuck Keller, FCC, dated January 28, 1997 (New York DPS January 28 *ex parte*).

<sup>956</sup> *See, e.g.*, CNMI comments at 30; GSA comments at 7-8; Ohio PUC comments at 12.

<sup>957</sup> Ohio PUC comments at 11-12.

<sup>958</sup> Edgemont comments at 2.

<sup>959</sup> New Jersey Advocate comments at 6.

<sup>960</sup> Catholic Conference comments at 8-9; Robert J. Lock comments at 16-18.

<sup>961</sup> Catholic Conference comments at 8-9; Robert J. Lock comments at 16-18.

number of connections permitted per year, the costs of the program will increase.<sup>962</sup>

239. Several commenters support the Joint Board's recommendation that, in order to be eligible for Link Up, consumers must meet a state-established means test or a federal default standard based on income or factors directly related to income.<sup>963</sup> California PUC, noting that California does not participate in the federal Link Up program, encourages the Commission to coordinate the revised Link Up program with existing state efforts, without duplicating resources.<sup>964</sup>

## **D. Services Included in Lifeline and Link Up**

### **1. Comments**

240. Designated Services. Many commenters support the Joint Board's recommendation that Lifeline customers should receive all those services designated for support in high cost areas, arguing that, under section 254(b)(3), access to services should be available to "[c]onsumers in all regions of the Nation, including low-income consumers."<sup>965</sup> United Church of Christ further emphasizes that the deployment of the designated services in low-income areas should not lag behind their deployment elsewhere.<sup>966</sup>

241. Toll-Limitation Services. Many commenters support the Joint Board's recommendation that Lifeline customers should receive voluntary toll limitation free of charge.<sup>967</sup> AT&T, SBC, Georgia PSC, and others, maintaining that toll limitation will increase subscribership among low-income consumers, point to evidence indicating that unpaid toll bills are the main reason people lose access to telecommunications services.<sup>968</sup> Several commenters

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<sup>962</sup> Robert J. Lock comments at 16-18.

<sup>963</sup> *See, e.g.*, CNMI comments at 30; GTE comments at 85.

<sup>964</sup> California PUC comments at 11-12.

<sup>965</sup> *See, e.g.*, Catholic Conference comments at 9; Citizens Utilities comments at 30; NCTA comments at 15-16; Washington UTC comments at 11.

<sup>966</sup> United Church of Christ comments at 2-4 (further recommending that the Commission take steps to ensure that low-income consumers living in urban areas are "proportionately represented at each stage of deployment" of telecommunication services, as compared to individuals living in suburban and rural areas).

<sup>967</sup> *See, e.g.*, California PUC comments at 10; Catholic Conference comments at 9; CNMI comments at 31; DC OPC comments at 1; Florida PSC comments at 4; GSA comments at 8-9; MFS comments at 27; NASUCA comments at 9; Ohio PUC comments at 8; Public Advocates comments at 2; SBC comments at 7; TURN comments at 2; WorldCom comments at 23; AT&T reply comments at 19; Georgia PSC reply comments at 2.

<sup>968</sup> *See, e.g.*, DC OPC comments at 1, 3; SBC comments at 7; AT&T reply comments at 19; Chicago reply comments at 7; Georgia PSC reply comments at 20.

assert that toll limitation, rather than an increased federal Lifeline support amount, may make the most significant impact on subscribership levels.<sup>969</sup> CNMI supports the Joint Board's recommendation that the Commission should require carriers currently incapable of providing toll limitation to add the capability in any switch upgrades.<sup>970</sup>

242. California Dept. of Consumer Affairs, on the other hand, is concerned that the cost of providing toll limitation to Lifeline customers at no charge will unduly burden other telecommunications customers,<sup>971</sup> and suggests that toll limitation should be provided to low-income consumers at a reduced fee so that they will better appreciate and manage the service they are receiving.<sup>972</sup>

243. PacTel agrees with the Joint Board that carriers providing toll limitation as part of Lifeline should receive support from the universal service support mechanisms.<sup>973</sup> PacTel argues, however, that carriers should receive support for both their start-up costs for initiating toll limitation services and lost revenue (defining lost revenue as the amount customers normally would pay for toll limitation).<sup>974</sup> This support, PacTel asserts, would cover the incremental costs and the portion of joint and common costs associated with the service.<sup>975</sup> PacTel also asserts, however, that the Commission should "allow carriers to devise specific solutions targeted at their own customers, rather than dictating a regulatory approach," citing studies concluding that consumers would prefer toll control services, rather than toll blocking. PacTel claims that consumers want services such as prepaid toll services and the ability to choose their own monthly toll cap.<sup>976</sup>

244. While Ameritech and California Dept. of Consumer Affairs support the Joint Board's recommendation that Lifeline customers should receive toll blocking free of charge, they are concerned that it may be difficult for carriers to provide toll control. Chicago, on the other hand, supports toll control and contends that it should be "made a priority" as long as CLECs

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<sup>969</sup> See, e.g., AT&T comments at 16; MFS comments at 28; New Jersey Advocate comments at 5; SBC comments at 7; Chicago reply comments at 7; Georgia PSC reply comments at 18.

<sup>970</sup> CNMI comments at 31.

<sup>971</sup> California Dept. of Consumer Affairs comments at 10.

<sup>972</sup> California Dept. of Consumer Affairs comments at 41-42.

<sup>973</sup> PacTel comments at 30.

<sup>974</sup> PacTel comments at 31.

<sup>975</sup> PacTel comments at 31.

<sup>976</sup> PacTel comments at 34.

and ILECs are treated alike.<sup>977</sup> Ameritech explains that toll control requires carriers to conduct "real time recording and rating of calls" made by subscribers using carriers other than the billing LEC.<sup>978</sup> Ameritech points out, for example, that it does not rate calls<sup>979</sup> made using other long distance carriers, so it would be unable to block calls immediately once Lifeline subscribers had reached their limit of toll calls, if the subscriber used another carrier to place toll calls.<sup>980</sup> For reasons similar to those Ameritech offers, California Dept. of Consumer Affairs urges the Commission not to take action regarding toll control in the absence of further analysis of the potential costs of such a policy.<sup>981</sup> Additionally, California Dept. of Consumer Affairs questions whether customers who reach their toll limit would be prohibited from placing any more calls until the bill is paid or until the beginning of the next month.<sup>982</sup> In the latter case, California Dept. of Consumer Affairs maintains that customers would still be able to incur substantial toll charges.<sup>983</sup>

245. MFS and Ohio PUC urge the Commission to adopt the Joint Board's recommendation that only low-income consumers should receive toll limitation free of charge.<sup>984</sup> New Jersey Advocate, on the other hand, believes that all consumers, not just low-income consumers, should receive toll limitation free of charge.<sup>985</sup> New Jersey Advocate bases its argument on New Jersey's small calling areas and the resulting number of consumers who regularly incur toll charges.<sup>986</sup>

246. No Disconnection for Non-Payment of Toll Charges. A number of commenters support the Joint Board's recommendation that carriers should be prohibited from disconnecting Lifeline customers' local service for non-payment of toll charges.<sup>987</sup> Many of these commenters

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<sup>977</sup> Chicago reply comments at 8.

<sup>978</sup> Ameritech comments at 16.

<sup>979</sup> "Rating calls" means recording the call's details, such as time of day, origin, termination, and duration, and applying the applicable tariff so that the charge for the call can be established.

<sup>980</sup> Ameritech comments at 16.

<sup>981</sup> California Dept. of Consumer Affairs reply comments at 12.

<sup>982</sup> California Dept. of Consumer Affairs comments at 42.

<sup>983</sup> California Dept. of Consumer Affairs comments at 42.

<sup>984</sup> MFS comments at 27; Ohio PUC comments at 8.

<sup>985</sup> New Jersey Advocate comments at 5-6.

<sup>986</sup> New Jersey Advocate comments at 6.

<sup>987</sup> See, e.g., Catholic Conference comments at 8; CNMI comments at 31-32; Edgemont comments at 2; GSA comments at 7-8; NASUCA comments at 10; New Jersey Advocate comments at 6; Ohio PUC comments at 9;

contend that such a policy will help increase subscribership among low-income consumers.<sup>988</sup> Ohio PUC notes that prohibiting local service disconnection for non-payment of toll charges also "contributes to a level playing field in the competitive market."<sup>989</sup> Moreover, TRA agrees with the Joint Board that a policy prohibiting disconnection of local service for non-payment of toll charges may encourage carriers to offer toll limitation to Lifeline subscribers.<sup>990</sup> AT&T notes the relationship between disconnection for non-payment of toll charges and low subscribership levels among low-income consumers, but asserts that the Commission should establish a "finite grace period after which carriers could disconnect" customers who have not paid their toll bills.<sup>991</sup>

247. Some commenters seek to emphasize that a policy of no disconnection for non-payment of toll charges should apply only to Lifeline customers, as the Joint Board recommended.<sup>992</sup> Moreover, WorldCom maintains that the Commission should emphasize that states are not required to adopt a no-disconnect policy for all end users.<sup>993</sup> DC OPC, on the other hand, contends that all customers should benefit from a policy prohibiting disconnection of local service for non-payment of toll charges.<sup>994</sup>

248. Several commenters would support a policy prohibiting termination of Lifeline customers' local service for non-payment of toll charges as long as the customers are required to accept toll limitation.<sup>995</sup> Ameritech and MFS assert that such a condition will help guard against abuse of the no-disconnect policy.<sup>996</sup> MFS further suggests that customers and the IXC should

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Public Advocates comments at 2; Telco comments at 12; TURN comments at 2; West Virginia Consumer Advocate comments at 6; WorldCom comments at 24; Chicago reply comments at 7-8; CPI reply comments at 17, 19.

<sup>988</sup> See, e.g., Catholic Conference comments at 8; DC OPC comments at 4; GSA comments at 7-8.

<sup>989</sup> Ohio PUC comments at 9.

<sup>990</sup> TRA reply comments at 15.

<sup>991</sup> AT&T comments at 17 and reply comments at 19-20.

<sup>992</sup> See, e.g., WorldCom comments at 24; Telco reply comments at 8; TRA reply comments at 15.

<sup>993</sup> WorldCom comments at 24.

<sup>994</sup> DC OPC comments at 4.

<sup>995</sup> See, e.g., Ameritech comments at 16; Bell Atlantic comments at 18; MFS comments at 27-28; New Jersey Advocate comments at 5-6; SBC comments at 8 (opposing prohibiting carriers from disconnecting service for non-payment of toll bills, but arguing that if the Commission implements such a policy, carriers must be allowed to impose mandatory toll limitation on Lifeline customers with a demonstrated history of unpaid toll bills); Sprint comments at 18 n.10.

<sup>996</sup> Ameritech comments at 16.

develop an extended payment plan or agree that the charges will be forgiven before a LEC is required not to disconnect the customer's local service for non-payment of toll charges.<sup>997</sup> Sprint suggests that the toll limit be set at a level such as \$10.00, which would provide adequate access to long distance service while still offering long distance carriers protection against uncollectible toll bills.<sup>998</sup>

249. On the other hand, several commenters urge the Commission not to adopt the Joint Board's recommendation that carriers be prohibited from disconnecting Lifeline customers' local service for non-payment of toll charges.<sup>999</sup> Some of these parties cite a lack of evidence that such a policy would increase subscribership.<sup>1000</sup> MCI, PacTel, USTA, and TRA argue that carriers in states that have implemented such a policy have experienced more uncollectible toll bills and a decline in subscribership.<sup>1001</sup> BellSouth argues that, because Lifeline customers can control toll charges by accepting toll limitation, prohibiting disconnection for non-payment of toll charges would not advance universal service.<sup>1002</sup>

250. Other parties opposing a policy of no disconnect for non-payment of toll bills argue that such a policy will generate losses for IXCs and increase toll fraud.<sup>1003</sup> MCI, PacTel, and others assert that uncollectible toll bills will drive up the cost of long distance services for consumers.<sup>1004</sup> GTE maintains that a no-disconnect policy will force carriers to cross-subsidize uncollectible toll bills with revenues obtained from customers who pay their toll bills.<sup>1005</sup> GTE argues that this would create a hidden subsidy in violation of the Act's mandate that universal service be explicit and sufficient, unless support is provided to offset uncollectible toll charges incurred as a result of the prohibition.<sup>1006</sup> PacTel argues that, in addition to support for

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<sup>997</sup> MFS comments at 28.

<sup>998</sup> Sprint comments at 18 n.10.

<sup>999</sup> See, e.g., California Dept. of Consumer Affairs comments at 42; GTE comments at 85-87; MCI comments at 12-13; PacTel comments at 31-37; USTA comments at 33; ACTA reply comments at 4; BellSouth reply comments at 11; Telco reply comments at 7-8.

<sup>1000</sup> See, e.g., GTE comments at 87; MCI comments at 12; PacTel comments at 31; Sprint reply comments at 6.

<sup>1001</sup> MCI comments at 12; PacTel comments at 32; USTA comments at 33; TRA reply comments at 15-16.

<sup>1002</sup> BellSouth comments at 11.

<sup>1003</sup> See, e.g., California Dept. of Consumer Affairs comments at 42; MCI comments at 12; BellSouth reply comments at 11.

<sup>1004</sup> See, e.g., MCI comments at 12; PacTel comments at 34; TRA reply comments at 16.

<sup>1005</sup> GTE comments at 85-86.

<sup>1006</sup> GTE comments at 85; PacTel comments at 34-35.

uncollectible toll bills, universal service support mechanisms should provide support for the increased costs associated with upgrading billing and collection systems and time spent explaining the new policy to customers.<sup>1007</sup> In the alternative, PacTel asserts, it should receive an exogenous cost adjustment as compensation for such upgrades.<sup>1008</sup>

251. PacTel asserts that it is beyond the scope of section 254 for the Commission to implement a rule prohibiting disconnection of local service for non-payment of interstate charges.<sup>1009</sup> PacTel argues that the Joint Board goes beyond the intent of section 254 to enhance universal service by "attempting, without factual support, to devise a means for customers who have such access to remain on the network regardless of the consequences to the industry."<sup>1010</sup> Additionally, ACTA asserts, without further elaboration, that such a policy is "constitutionally suspect."<sup>1011</sup> GTE further contends that (1) the recommendation prohibiting disconnection for non-payment of toll charges is an "unjustifiable and unwarranted governmental intrusion into the affairs of private businesses," especially in light of the pro-competitive, deregulatory marketplace that Congress envisioned in passing the 1996 Act, and (2) merely providing the option of toll limitation does not justify a disconnection prohibition.<sup>1012</sup> GTE and PacTel argue that market-driven initiatives, rather than regulatory policies, will have a greater impact on subscribership among low-income consumers than the rule prohibiting disconnection for non-payment of toll.<sup>1013</sup> GTE and PacTel therefore maintain that the Commission should let carriers and the states devise means of increasing subscribership.<sup>1014</sup> PacTel, for example, claims to have improved subscribership through partnerships with community organizations.<sup>1015</sup> WorldCom suggests that, as an alternative to a policy prohibiting disconnection of local service for non-payment of toll charges, the Commission could prohibit carriers from disconnecting Lifeline customers' access to certain critical services, such as 911 (emergency service) and 611 (telephone repair service).<sup>1016</sup>

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<sup>1007</sup> PacTel comments at 34-35.

<sup>1008</sup> PacTel comments at 35.

<sup>1009</sup> PacTel comments at 36-37.

<sup>1010</sup> PacTel comments at 36-37.

<sup>1011</sup> ACTA reply comments at 4.

<sup>1012</sup> GTE comments at 86.

<sup>1013</sup> GTE comments at 85-86; PacTel comments at 33.

<sup>1014</sup> GTE comments at 85-86; PacTel comments at 33.

<sup>1015</sup> PacTel comments at 33.

<sup>1016</sup> WorldCom reply comments at 15.



252. PacTel argues that if the Commission adopts a no-disconnect policy, it should relax the waiver requirements proposed by the Joint Board so that carriers need only provide effective toll-limitation services to obtain a waiver.<sup>1017</sup> PacTel opposes the waiver requirement proposed by the Joint Board that "telephone subscribership among low-income consumers in the carrier's service area must [be] at least as high as the national subscribership level for low-income consumers." PacTel argues, however, that if it adopts such a requirement, the Commission should require the difference between the national subscribership level and the level in the carrier's service area to be at least three percentage points.<sup>1018</sup>

253. Prohibition on Service Deposits. Several commenters support the Joint Board's recommendation to prohibit customer service deposits,<sup>1019</sup> provided that the customer accepts toll limitation, where available.<sup>1020</sup> Commenters assert that the elimination of service deposits may help increase subscribership among low-income consumers.<sup>1021</sup> Furthermore, DC OPC notes that requiring customers to accept toll-limitation service in order to have their service deposit waived will significantly reduce the risk of uncollectible toll bills.<sup>1022</sup> Edgemont and Ohio PUC support the Joint Board's recommendation to eliminate service deposits, but they do not believe the Commission should require customers to accept toll limitation in order to benefit from this policy.<sup>1023</sup>

254. USTA argues that there is an insufficient correlation between toll limitation and service deposits, because customers' acceptance of toll limitation does not provide carriers with protection against customers with poor credit history.<sup>1024</sup> While toll limitation may prevent toll bills from increasing, USTA argues, it does not give customers an incentive to pay outstanding balances. GTE opposes the Joint Board's recommendation that service deposits be prohibited if a customer accepts toll limitation because (1) "toll blocking service is not effective when an individual is determined to evade [toll] blocking"; and (2) the policy would not allow carriers to

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<sup>1017</sup> PacTel comments at 31-32, 36.

<sup>1018</sup> PacTel comments at 36.

<sup>1019</sup> Customer service deposits are distinct from service connection charges; service connection charges pay for the cost of the initial connection to the network.

<sup>1020</sup> See, e.g., CNMI comments at 33; DC OPC comments at 1, 3-4; NASUCA comments at 10; New Jersey Advocate comments at 6; SBC comments at 7; TURN comments at 2; Catholic Conference reply comments at 8-9; Georgia PSC reply comments at 20.

<sup>1021</sup> See, e.g., Catholic Conference comments at 8-9; DC OPC comments at 1, 3-4; Florida PSC comments at 4-5; Ohio PUC comments at 12.

<sup>1022</sup> DC OPC comments at 3.

<sup>1023</sup> Edgemont comments at 2; Ohio PUC comments at 12.

<sup>1024</sup> USTA comments at 34.

receive support for any losses they may incur in eliminating service deposits for Lifeline customers.<sup>1025</sup>

255. California Dept. of Consumer Affairs supports a "minimal" service deposit for Lifeline customers who elect to receive toll limitation.<sup>1026</sup> Ameritech claims that a complete waiver of service deposits may not be appropriate in all cases, especially in jurisdictions with usage-based local rates.<sup>1027</sup>

256. Edgemont urges the Commission to find that (1) companies offering local service may only seek repayment of their own local arrearage for customers seeking to reestablish local service; and (2) companies must make reasonable repayment arrangements for both local and toll arrearages.<sup>1028</sup> In this way, Edgemont argues, many potential Lifeline customers will be able to benefit from low-income support programs, while the companies will be able to collect on arrearages.<sup>1029</sup>

257. Special Needs Equipment for Low-income Individuals with Disabilities. A few commenters disagree with the Joint Board's recommendation that universal service support for low-income consumers with disabilities need not be addressed in this proceeding because it will be addressed in a separate proceeding to implement section 255.<sup>1030</sup> NAD, United Cerebral Palsy Ass'n, and Universal Service Alliance maintain that basic access to voice telephony and other wireline service is often very expensive for people with disabilities.<sup>1031</sup> Furthermore, United Cerebral Palsy Ass'n and Consumer Action assert that people with disabilities are among the poorest in the nation.<sup>1032</sup> National Telecommuting Institute proposes that employers that hire low-income, homebound individuals with disabilities should receive a waiver for all voice and data line charges incurred between the employee and company, with the service provider

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<sup>1025</sup> GTE comments at 87-88.

<sup>1026</sup> California Dept. of Consumer Affairs reply comments at 11.

<sup>1027</sup> Ameritech comments at 16-17.

<sup>1028</sup> Edgemont comments at 3-4.

<sup>1029</sup> Edgemont comments at 3-4.

<sup>1030</sup> See, e.g., NAD comments at 2-5; United Cerebral Palsy Ass'n comments at 3-6; Universal Service Alliance comments at 5-7; Consumer Action reply comments at 3-4.

<sup>1031</sup> NAD comments at 2-5; United Cerebral Palsy Ass'n comments at 3; Universal Service Alliance comments at 6-7.

<sup>1032</sup> United Cerebral Palsy Ass'n comments at 5; Consumer Action reply comments at 3-4.

receiving support from universal service support mechanisms.<sup>1033</sup>

258. Additionally, NAD, United Cerebral Palsy Ass'n, and Universal Service Alliance disagree with the Joint Board's reliance on section 255 to address access to telecommunications services for people with disabilities.<sup>1034</sup> NAD and United Cerebral Palsy Ass'n contend that, although section 255 requires access to telecommunications devices and services, it does not require the establishment of specialized customer premises equipment distribution programs or the development of funding sources for that purpose, nor provide for the needed funding to create parity in toll charges for TTY users.<sup>1035</sup> NAD and Consumer Action also maintain that the Commission has not made clear what action it intends to take with respect to section 255, including whether it will issue a rulemaking.<sup>1036</sup>

259. Support for Non-profit Organizations. A few commenters argue that community organizations providing services to low-income individuals should receive support from universal service support mechanisms.<sup>1037</sup> Public Advocates argues that providing universal service support to community organizations is one of the most efficient and effective ways of adhering to the statutory principle that "access to advanced telecommunications services should be provided in all regions of the nation."<sup>1038</sup> Catholic Conference maintains that universal service support should be given to organizations and social service agencies providing voice mail to homeless individuals and migrant farmworkers.<sup>1039</sup> Alternatively, Catholic Conference argues, universal service support should be given to such entities for providing telephone service, because many of the people they serve lack access to a residential line.<sup>1040</sup> Alliance for Community Media suggests that universal service support should be available to community computing centers so that low-income individuals could gain access to the Internet and other

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<sup>1033</sup> Letter from M.J. Willard, National Telecommuting Institute, Inc., and the President's Committee on Employment of People with Disabilities, to William F. Caton, FCC, (National Telecommuting Institute, Inc. *ex parte*) (also recommending that if training is necessary to prepare a homebound individual for a telecommuting position, the cost of connecting the trainee to the trainer through telephone lines be covered by universal service support mechanisms).

<sup>1034</sup> NAD comments at 2-4; United Cerebral Palsy Ass'n comments at 5; Universal Service Alliance comments at 7.

<sup>1035</sup> NAD comments at 4-5; United Cerebral Palsy Ass'n comments at 5.

<sup>1036</sup> NAD comments at 4 n.1; Consumer Action reply comments at 3-4.

<sup>1037</sup> See, e.g., Alliance for Community Media comments at 8-9; Catholic Conference comments at 7; Public Advocates comments at 4-7.

<sup>1038</sup> Public Advocates comments at 6, *citing* 47 U.S.C. § 254(b)(2).

<sup>1039</sup> Catholic Conference comments at 7.

<sup>1040</sup> Catholic Conference comments at 7.

advanced communications services.<sup>1041</sup> Community Colleges argues that many community colleges constitute low-income consumers and therefore should qualify for Lifeline support.<sup>1042</sup>

260. Non-Residential Services. Catholic Conference disagrees with the Joint Board's recommendation that low-income support should be limited to residential services and asserts that universal service support should be provided to low-income consumers for voice messaging service.<sup>1043</sup> Voice messaging service for people who lack access to a residential line, such as homeless individuals and migrant farmworkers, meets all of the criteria enumerated in section 254(c)(1), Catholic Conference argues.<sup>1044</sup> Additionally, Robert J. Lock argues that people without access to wireline technology, such as homeless individuals, could benefit from the provision of wireless technology.<sup>1045</sup>

261. Marketing and Consumer Awareness Information. Benton Foundation argues that support should be provided to ensure that competitively neutral and accurate information about universal service programs is disseminated, particularly to low-income communities.<sup>1046</sup> Similarly, Florida PSC argues that more consumer awareness information about the existence of Lifeline and Link Up should be available.<sup>1047</sup>

262. Other Services. Seattle supports the Joint Board's recommendation that universal service support for interexchange and advanced services for Lifeline customers should not be provided at this time.<sup>1048</sup> Urban League, on the other hand, suggests that low-income consumers should have access to advanced services through telecommunications lines with fax and modem capability.<sup>1049</sup>

## **IX. ISSUES UNIQUE TO INSULAR AREAS**

### **A. Overview**

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<sup>1041</sup> Alliance for Community Media comments at 8-9.

<sup>1042</sup> Community Colleges comments at 7, 9.

<sup>1043</sup> Catholic Conference comments at 4-6.

<sup>1044</sup> Catholic Conference comments at 5-6.

<sup>1045</sup> Robert J. Lock comments at 23, 24.

<sup>1046</sup> Benton Foundation reply comments at 3-5.

<sup>1047</sup> Florida PSC comments at 4.

<sup>1048</sup> Seattle comments at 1.

<sup>1049</sup> Urban League comments at 9. *See also* Nat'l Black Caucus comments at 19 (underserved communities should have access to advanced services).

263. The following is a summary of the comments relating to issues unique to insular areas.

264. CNMI largely supports the Joint Board's recommendations, but argues that its recommendation regarding toll-free access should be modified.<sup>1050</sup> CNMI is concerned that under the Joint Board's recommendation callers in the Pacific Island territories will continue to be required to dial 880 to complete many "toll-free" calls, and thus will have to pay for the portion of those calls between CNMI and Hawaii.<sup>1051</sup> CNMI argues that having callers from the Pacific Island territories incur a charge for a "toll-free" service while callers from other areas in the United States have true "toll-free" service constitutes unlawful discrimination under section 202,<sup>1052</sup> and violates the principle set forth in section 254(b)(3) that consumers in all regions should have access to telecommunications services that are reasonably comparable, and at rates reasonably comparable, to those in urban areas.<sup>1053</sup>

265. CNMI argues that if the Commission is unwilling to provide support for this service now, it should revisit this issue after August 1, 1997. By that date the Pacific Island territories will have become part of the NANP and will have integrated interexchange rates with the mainland; the Commission can then assess the effect of these changes before determining whether universal service support is necessary.<sup>1054</sup> If the Commission proceeds this way, CNMI requests that the Commission clarify that interexchange carriers serving the Pacific Island territories can continue to use 880 numbers to allow consumers to access toll-free numbers on an interim basis,<sup>1055</sup> despite MTC's assertion that carriers are prohibited from using 880 numbers once CNMI becomes part of NANP.<sup>1056</sup> CNMI states that it is unaware of any legal restriction

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<sup>1050</sup> CNMI comments at 5.

<sup>1051</sup> CNMI comments at 6. According to CNMI, because the vast majority of toll-free access customers in the United States do not purchase toll-free access service that includes the Northern Mariana Islands, Micronesia Telecommunications Corporation (MTC) offers "paid access" to many toll-free (800/888) numbers. Under this arrangement the calling party calls an 880 number and pays a charge that covers the cost of the portion of the call from the Northern Mariana Islands to Hawaii, where the call is linked to the domestic toll-free access service. CNMI comments at 7.

<sup>1052</sup> 47 U.S.C. § 202.

<sup>1053</sup> 47 U.S.C. § 254(b)(3). CNMI comments at 6, 9-10. *See also* Interior reply comments at 1-2 (requesting the Commission to provide support so that toll-free service is available free of charge to call-originating end users in the Pacific Island territories).

<sup>1054</sup> CNMI comments at 12.

<sup>1055</sup> CNMI comments at 14.

<sup>1056</sup> CNMI cites to a September 20, 1996 press report in the *Marianas Variety* quoting an official from MTC, and MTC's reply comments filed on September 16, 1996 in Policies and Rule Governing Interstate Pay-Per-Call and Other Information Services Pursuant to the Telecommunications Act of 1996 and Policies and Rules Implementing the Telephone Disclosure and Dispute Resolution Act, *Order and Notice of Proposed Rule Making*,

that would preclude the use of 880 numbers for toll-free calls between the Pacific Island territories and the mainland United States once the islands become part of NANP.<sup>1057</sup>

266. The Governor of Guam supports the recommendations of the Joint Board and commends the Board for recognizing that insular areas may require special treatment.<sup>1058</sup> The Governor does not disagree with the recommendation to delay the examination of the issue of support for toll-free access to the Pacific Island territories, but suggests that it may be necessary to provide some safeguards in the treatment of toll-free access to the islands.<sup>1059</sup> Specifically, the Governor suggests that toll-free service providers be required to include Guam automatically in "nationwide" service areas.<sup>1060</sup> The Governor also suggests that consumers in the Pacific Island territories be permitted to continue using 880 or 881 during a transition period, while toll-free customers make business decisions about whether to serve the islands.<sup>1061</sup> Regarding access to information services, the Governor notes that the Pacific Island territories are in a unique position because the National Information Infrastructure (NII) "superhighway," funded, at least in part, by the National Science Foundation, has not been extended to the islands.<sup>1062</sup> Consequently, according to the Governor, Internet users on Guam not only pay higher rates for usage, but also get inferior services due to bandwidth congestion.<sup>1063</sup>

## **X. SCHOOLS AND LIBRARIES**

### **A. Overview**

267. The following is a summary of the comments relating to the issue of schools and

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11 FCC Rcd 14738 (1996). *See* CNMI comments at 13-14.

<sup>1057</sup> CNMI comments at 13-14. The use of 880 and 881 numbers to access toll-free numbers originates with a resolution of the Industry Numbering Committee (INC). *See* Industry Numbering Committee, Issue #34: Allocation Request for 880 NPA Code, resolution date: November 3, 1995. INC Issue #34 resolved that 880 and 881 numbers could be used for inbound foreign-billed 800 type service. It, however, does not allow for the use of 880 or 881 numbers to place calls within the same country in the NANP.

<sup>1058</sup> Governor of Guam comments at 2.

<sup>1059</sup> Governor of Guam comments at 7.

<sup>1060</sup> Governor of Guam comments at 8. Under the Governor's proposal, the toll-free access customers would not be required to subscribe to nationwide service. The service providers would be required to inform toll-free access customers of their option not to include the Pacific Island territories in their service plan. Governor of Guam comments at 8.

<sup>1061</sup> Governor of Guam comments at 8-9. *See also* Interior reply comments at 2.

<sup>1062</sup> Governor of Guam comments at 6.

<sup>1063</sup> Governor of Guam comments at 5.

libraries.

## **B. Telecommunications Carrier Functionalities and Services Eligible for Support**

### **1. Comments**

#### **a. Telecommunications Services**

268. Most commenters support the Joint Board's recommendation that all commercially available telecommunications services be eligible for universal service support.<sup>1064</sup> USTA, for example, notes that "[t]his is a reasonable approach that provides schools and libraries with maximum flexibility to select the services they need and avoids favoring a particular service or technology."<sup>1065</sup> BPL states that libraries should be entitled to select the services they need because technology advances and market needs should determine what services they choose to use.<sup>1066</sup> New York Public Library asserts that "[t]he Joint Board's plan allows each library and school system to evaluate its priorities, and develop a telecommunications network that would best address those priorities."<sup>1067</sup> While generally supporting the Joint Board's recommendation that all telecommunications services be eligible for support, CTIA asserts that the Commission should go beyond simply allowing schools and libraries to choose wireless services, but "should also preempt any State or local statutes or regulations which exclude, or have the effect of excluding, wireless carriers."<sup>1068</sup> Ameritech states that inclusion of all telecommunications services is acceptable, as long as the fund is capped at a reasonable level.<sup>1069</sup>

269. While generally supporting the Joint Board's recommendations regarding the functionalities and services eligible for support, some commenters ask the Commission to focus support on T-1 or greater bandwidth services or to prefer local service over internal connections

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<sup>1064</sup> See, e.g., AFT comments at 1; ALA comments at 2; Ameritech comments at 18; APTS comments at 3-4; Brooklyn Public Library comments at 2; City of Seattle comments at 1; EDLINC comments at 4; New York Public Library comments at 1; USTA comments at 35; Atlanta Board of Education reply comments at 1; Fort Frye School District reply comments at 1; Vanderbilt reply comments at 2.

<sup>1065</sup> USTA comments at 35.

<sup>1066</sup> Brooklyn Public Library comments at 2.

<sup>1067</sup> New York Public Library comments at 1. See also EDLINC comments at 4 (stating that "[s]chools and libraries are in the best position to determine what services they need and allowing flexibility is the best means of encouraging schools and libraries to determine the level and type of service that best suits their requirements").

<sup>1068</sup> CTIA comments at 9-10 (footnote omitted).

<sup>1069</sup> Ameritech comments at 18 and n.27.

or Internet access.<sup>1070</sup> New York DOE, for example, states that advanced telecommunications services should be the "major focus for funding support," with a minimum standard of T-1 or comparable bandwidth.<sup>1071</sup> Apple comments that, "at this juncture, universal service for a school, [or] library . . . must, at a minimum, be referenced to the equivalent of at least one dedicated T-1 (1.544 Mbps) line, with that capacity controlled by the organization consuming the service."<sup>1072</sup> Apple also notes that, "[i]n the near future, universal service will have to comprise a full range of additional digital services, with bandwidths ranging between at least 45 and 100 Mbps."<sup>1073</sup> Vermont PSB maintains that, because financial resources are constrained, the Commission should establish a priority order to address the telecommunications needs of schools and libraries. That is, telecommunications services, including measured local usage, should be fully funded before subsidies for internal connections or Internet access are considered.<sup>1074</sup>

270. Some commenters, on the other hand, oppose providing a discount for all telecommunications services.<sup>1075</sup> SBC contends that "such an approach would be an abdication of the Commission's responsibility under Section 254(c)(3)."<sup>1076</sup> SBC also states that the Joint Board's recommendation to designate all telecommunications services eligible for discounts is inconsistent with its approach to define specifically the services eligible for support under section 254(b)(1).<sup>1077</sup> "Adopting this recommendation of the Joint Board would violate the Act, and would be arbitrary, unreasonable, and otherwise unlawful."<sup>1078</sup> New York DPS contends that "[u]nder [s]ection 254(h)(1)(B), states are free (contrary to the proposal of the Joint Board) to determine 'appropriate and necessary' discounts on intrastate services and thus should be able to determine which intrastate services need to be discounted."<sup>1079</sup> New York DPS argues, therefore, that providing discounts for all telecommunications services will limit states'

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<sup>1070</sup> See, e.g., Apple comments at 4; New York DOE comments at 6; Vermont PSC comments at 15.

<sup>1071</sup> New York DOE comments at 6.

<sup>1072</sup> Apple comments at 4.

<sup>1073</sup> Apple comments at 4.

<sup>1074</sup> Vermont PSB comments at 15 (supporting discounts on Local Measured Service usage charges, since they are necessary for dial-up access to information services).

<sup>1075</sup> See, e.g., SBC comments at 43-44, 49-50; New York DPS reply comments at 2-3. See also Fred Williamson comments at 5 (stating that universal service should be provided for basic local exchange access service only).

<sup>1076</sup> SBC comments at 43-44.

<sup>1077</sup> SBC comments at 49-50.

<sup>1078</sup> SBC comments at 50.

<sup>1079</sup> New York DPS reply comments at 2-3.



flexibility to design intrastate programs.<sup>1080</sup>

271. Ohio DOE and Ohio PUC encourage the Commission to consider the "equity" issue that applies to states, such as Ohio, that have already spent considerable amounts of money on facilities and technologies.<sup>1081</sup> Ohio DOE, for example, asks that the Commission "make universal service support flexible and fair such that Ohio schools can build upon and enhance technologies already in place with support for recurring costs and technological options which would fill in the gaps and seams in our system."<sup>1082</sup>

## **b. Internet Access**

272. Numerous commenters support the Joint Board's recommendation to include Internet access and electronic mail within the services available to schools and libraries pursuant to the universal service discount.<sup>1083</sup> EDLINC, for example, states that access to the World Wide Web and electronic mail has become a necessary and basic tool for transmitting and gathering information, and is likely to become even more important. EDLINC notes further that "[i]f schools and libraries are not eligible for discounts on what is fast-becoming a basic element in the communications network, the purpose of [s]ection 254 will not have been met."<sup>1084</sup> AOL states that "[t]he Joint Board's recommendation implements the schools and libraries section of the Telecommunications Act of 1996 as its sponsors intended -- to bring the educational benefits of the Internet within the reach of all Americans."<sup>1085</sup> NCTA asserts that section 254(h)(2) "contemplates the inclusion of 'access' as part of universal service without regard to the regulatory treatment of access services."<sup>1086</sup> NCTA argues, therefore, that section 254(h)(2) allows the Commission to include such non-telecommunications services as Internet access

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<sup>1080</sup> New York DPS reply comments at 2.

<sup>1081</sup> Ohio DOE comments at 4; Ohio PUC comments at 16-17.

<sup>1082</sup> Ohio PUC comments at 16.

<sup>1083</sup> See, e.g., AOL comments at 4-8; Business Software Alliance comments at 1-2; CNMI comments at 36; Commercial Internet Exchange comments at 2-3; EDLINC comments at 4; Great City Schools comments at 2; Illinois State Library comments at 2; Juno Online comments at 4-7; Metricom comments at 2; NetAction comments at 6; North Dakota PSC comments at 2; Oracle comments at 1; People For comments at 10; Seattle comments at 1; Atlanta Board of Education reply comments at 1; Colorado LEHTC reply comments at 2; Fort Frye School District reply comments at 1; GI reply comments at 1-2; NCTA reply comments at 5-7; Small Cable reply comments at 2. Cf. RTC comments at 43-44 (supporting the provision of toll-free dial-up Internet access for schools and libraries); Interior reply comments at 3 (same); NTIA reply comments at 29-30 (same).

<sup>1084</sup> EDLINC comments at 4.

<sup>1085</sup> AOL comments at 1-2 (footnote omitted, citing Feb. 1, 1996 statement of Senator Snowe).

<sup>1086</sup> NCTA reply comments at 6.

"within the ambit of universal service for schools and libraries."<sup>1087</sup> Commercial Internet Exchange agrees and states that analysis should not focus on whether a service is a telecommunications or an information service, but rather "whether Internet access qualifies as an 'advanced service' under [s]ection 254(h)(2)."<sup>1088</sup>

273. Numerous other commenters, including most of the Regional Bell Operating Companies (RBOCs), challenge the Commission's authority to designate non-telecommunications services, such as Internet access, as eligible for universal service support.<sup>1089</sup> These commenters assert that the Act limits universal service support to telecommunications services, and that the various sections of section 254(h) referring to "services" must be read in concert.<sup>1090</sup> For example, BellSouth maintains that section 254(c)(1) defines universal service as "an evolving level of telecommunications services."<sup>1091</sup> AT&T notes that the subsequent reference to "additional services" in section 254(c)(3) relates directly back to the "telecommunications services" referenced in section 254(c)(1).<sup>1092</sup>

274. BellSouth adds that, while section 254(c)(3) allows the Commission to designate additional services as eligible for universal service support, that section "does not provide that such additional universal services may include non-telecommunications services."<sup>1093</sup> SBC states further that any doubt about the meaning of "additional services" contained in section

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<sup>1087</sup> NCTA reply comments at 6. *See also* Small Cable reply comments at 2 (stating that "[s]ection 254(h)(2) gives the Commission the authority to promulgate this rule to enhance access to information services").

<sup>1088</sup> Commercial Internet Exchange reply comments at 8.

<sup>1089</sup> *See, e.g.,* ALLTEL comments at 5; Ameritech comments at 18-19; AT&T comments at 20; BellSouth comments at 22-25; Citizens Utilities comments at 11-13; GTE comments at 89-95; PacTel comments at 37-41; SBC comments at 43; USTA comments at 35; ACTA reply comments at 4; APC reply comments at 6; GCI reply comments at 13; Sprint reply comments at 2-3. *Cf.* PCIA reply comments at 14 (stating that determination of whether non-telecommunications services such as Internet access should be eligible for universal service support should be deferred until the attendant legal issues are resolved).

<sup>1090</sup> *See, e.g.,* ALLTEL comments at 5; Ameritech comments at 18-19; AT&T comments at 20; BellSouth comments at 22-25; Citizens Utilities comments at 11-13; GTE comments at 89-95; PacTel comments at 37-41; SBC comments at 43-44; USTA comments at 35; GCI reply comments at 13.

<sup>1091</sup> BellSouth comments at 22 (*citing* 47 U.S.C. § 254(c)(1)) (emphasis omitted).

<sup>1092</sup> AT&T comments at 19. *See also* SBC comments at 44 (noting that the reference to "additional services" in section 254(c)(3) "clearly means 'additional telecommunications services,' consistent with the use of 'services' throughout [s]ection 254(c)").

<sup>1093</sup> BellSouth comments at 23 (noting that "[t]o interpret [s]ection 254(c)(3) as providing authority for the Commission to designate additional 'services' for USF support, regardless of whether they are 'telecommunications services,' would mean that the Commission could designate any 'services' whatsoever for the purposes of subsection (h), whether or not even remotely related to telecommunications services, as long as, of course, provided for 'educational purposes'").

254(c)(3) is removed when referring to section 254(h)(1)(B), "which discusses reimbursement for telecommunications carriers providing `any of its services which are within the definition of universal services under [[s]ection 254(c)(3)].'"<sup>1094</sup> SBC asserts that inclusion of information services such as Internet access is not addressed anywhere within sections 254(c)(1), (c)(3), or (h)(1)(B).<sup>1095</sup> PacTel states that only "[a] school's or library's purchase of telecommunications service from a telecommunications carrier to connect the school's or library's equipment to the telecommunications network for the purpose of reaching the Internet service provider could be made at discounted prices that are directly supported by the universal service fund."<sup>1096</sup> PacTel adds that if a telecommunications carrier is also an Internet service provider and packages the telecommunications and information services together, only the telecommunications portion of the package would be eligible for universal service support.<sup>1097</sup>

275. Several commenters assert that relying on section 254(h)(2)(A) to support discounts for Internet access does not provide a sound basis for the Joint Board's recommendation.<sup>1098</sup> BellSouth, for example, maintains that section 254(h)(2), which requires the Commission to "enhance access" to advanced telecommunications and information services, "cannot override the explicit provisions of Section 254(c)(1) limiting universal services to such telecommunications services as the Commission shall designate."<sup>1099</sup> Ameritech states that the reference in section 254(h)(2)(A) to enhancing access to "information services," indicates that "what is meant is not that the information services themselves are included in the concept of universal service but rather `access to' those services -- i.e., the communications services that connect the educational institution to the information services," is what the statute contemplated.<sup>1100</sup> Citizen Utilities notes that the Joint Board distinguished between access and services in other contexts, including its recommendation to provide universal service support for access to interexchange service and access to directory assistance services, but not to provide

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<sup>1094</sup> SBC comments at 44.

<sup>1095</sup> SBC comments at 44.

<sup>1096</sup> PacTel reply comments at 22.

<sup>1097</sup> PacTel reply comments at 22.

<sup>1098</sup> *See, e.g.*, Ameritech comments at 18-19; BellSouth comments at 23; Citizens Utilities comments at 11-12; PacTel comments at 39-41; SBC comments at 44-45;

<sup>1099</sup> BellSouth comments at 23 (emphasis omitted).

<sup>1100</sup> Ameritech comments at 18-19. *See also* Citizens Utilities comments at 11 (stating that "it is clear that `access' is meant to be the means of physical connection, via a telecommunications service, between schools and libraries and advanced telecommunications services and information services"); GTE comments at 93 (asserting that "[t]elecommunications services are to be provided; however, only access to, not the advanced services themselves, is required here"); SBC comments at 44 (stating that "[t]he Commission is to adopt competitively neutral rules `to enhance . . . access,' not to include and support information services or non-telecommunications service provided by non-carriers").

support for those underlying services. Citizens Utilities asserts that "[t]he same logic suggests that the service provided by a telecommunications carrier in access to the Internet can be severed from the service that an Internet access provider extends over the telecommunications carrier's transmission facility. It is only the latter facility that should, under [s]ection 254(h), be the subject of funded discounts."<sup>1101</sup> SBC notes that section 254(h)(2)(A) "does not speak of discounts, funds for discount reimbursement or carrier contributions; it speaks only of 'competitively-neutral rules.'"<sup>1102</sup>

276. Commenters opposing universal service support for non-telecommunications services raise two final issues. First, BellSouth and GTE argue that supporting Internet access is bad public policy. BellSouth asserts that local community initiatives are available to fund such services for schools and libraries, and "[c]learly the Act did not intend to usurp local community involvement and responsibility for its schools."<sup>1103</sup> GTE maintains that providing such support may interfere with the competitive markets currently providing non-telecommunications services.<sup>1104</sup> Second, Netscape contends that the Recommended Decision failed to "deal with the jurisdictional issues involved in Internet access."<sup>1105</sup> Since the telecommunications services underlying Internet access are arguably intrastate, Netscape maintains they are not within the Commission's authority. Netscape recommends that the Commission classify Internet access as an interstate service, since most such communications cross state lines. "Without this sort of preemption of state authority, the Commission's Internet-related decisions under [s]ection 254(h) may draw unnecessary legal challenge, compromising the goal, which Netscape shares, of making Internet access available universally to U.S. K-12 schools and libraries."<sup>1106</sup>

277. Numerous commenters support the Joint Board's recommendation permitting non-telecommunications carriers that provide eligible services to schools and libraries to draw from universal service support mechanisms.<sup>1107</sup> TCI, for example, asserts that such a result is

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<sup>1101</sup> Citizens Utilities comments at 13-14.

<sup>1102</sup> SBC comments at 44.

<sup>1103</sup> BellSouth comments at 27.

<sup>1104</sup> GTE comments at 93-94.

<sup>1105</sup> Netscape comments at 6 n.21.

<sup>1106</sup> Netscape comments at 7 n.21.

<sup>1107</sup> See, e.g., Commercial Internet Exchange comments at 2-3; Cox comments at 10-11; Metricom comments at 2; NetAction comments at 7; TCI comments at 10; WinStar comments at 2-3; Business Software Alliance reply comments at 7; EDLINC reply comments at 3-5, 20; GI reply comments at 4; NCTA reply comments at 5-7; Small Cable reply comments at 3.

within the Commission's authority under section 254(h)(2)(A).<sup>1108</sup> WinStar maintains that the Commission should clarify that the eligibility requirements of section 214(e) do not apply to providers furnishing supported services to schools and libraries."<sup>1109</sup> Commercial Internet Exchange asserts that section 254(e) requires that only providers of core telecommunications services under section 254(c)(1) can recover some of the costs of providing those services from universal service support mechanisms. Because universal service support mechanisms are intended to provide support for the broader category of section 254(h)(2) advanced services, however, Commercial Internet Exchange contends that recovery from universal service support mechanisms is not limited to carriers eligible under section 214(e).<sup>1110</sup>

278. Commercial Internet Exchange also states that allowing Internet service providers to participate in the competitive bidding process and to receive universal service support for providing services to schools and libraries is mandated by the competitive neutrality requirement contained in section 254(h)(2).<sup>1111</sup> Including Internet service providers in the discount program, according to Commercial Internet Exchange, will also lead to more competitive pre-discount prices for services which will, in turn, "reduce the reimbursement burden on the universal service fund for each school and library participating in the program."<sup>1112</sup> NetAction, while noting that allowing non-telecommunications carriers to draw from universal service support mechanisms without requiring them to contribute is "inherently unstable, and open to possible appellate challenge," states further that "[t]he Joint Board properly interpreted the Act to require competitively neutral rules to advance universal service policies, rather than limit support to providers which must meet the narrow definition of `telecommunications provider.'"<sup>1113</sup>

279. Cox submits that requiring only telecommunications carriers to contribute to

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<sup>1108</sup> TCI comments at 9. *See also* Cox comments at 10 (stating that "[t]he Recommended Decision takes an important initial step by determining that [s]ection 254(h) does not limit eligibility for school, [and] library . . . subsidies to telecommunications carriers") (footnote omitted).

<sup>1109</sup> WinStar comments at 2-3.

<sup>1110</sup> Commercial Internet Exchange reply comments at 9. *See also* Business Software Alliance reply comments at 7 (stating that the section 254(e) restriction applies only to telecommunications carriers providing core telecommunications services under the general universal service program and "has no applicability to non-telecommunications products pursuant to the specific program that Congress established for schools and libraries").

<sup>1111</sup> Commercial Internet Exchange comments at 4. *See also* NCTA reply comments at 7 (stating that "[s]ection 254(h)(2)'s mandate of competitive neutrality ensures that *any* entity can compete to provide access to schools and libraries regardless of whether it is a telecommunications carrier").

<sup>1112</sup> Commercial Internet Exchange comments at 4-5. *See also* Small Cable reply comments at 5 (stating that providing universal service support to non-telecommunications carriers will foster competition in the provision of services to schools and libraries).

<sup>1113</sup> NetAction comments at 7.

universal service support mechanisms but allowing non-telecommunications providers to receive universal service support from those same mechanisms is neither inconsistent nor unfair.<sup>1114</sup> Telecommunications carriers will contribute to universal service support mechanisms based on telecommunications revenues, not on revenues from non-telecommunications services such as Internet access.<sup>1115</sup> EDLINC notes that because telecommunications carriers will not be competing with non-telecommunications carriers to provide telecommunications services, the fact that only telecommunications carriers must contribute to universal service support mechanisms based on their provision of telecommunications services does not put them at a competitive disadvantage with respect to non-telecommunications carriers, such as Internet service providers.<sup>1116</sup> To the contrary, EDLINC states, the provision of universal service support for non-telecommunications services such as Internet access will be available to both telecommunications and non-telecommunications carriers. EDLINC contends that because neither entity will be required to contribute to universal service support mechanisms based on the provision of these non-telecommunications services and because both entities will be eligible to receive reimbursement from universal service support mechanisms for their provision of these services, neither party will be at a competitive disadvantage.<sup>1117</sup>

280. Numerous other commenters, again including most of the BOCs, challenge the Commission's authority to permit non-telecommunications carriers to draw from universal service support mechanisms.<sup>1118</sup> NYNEX, for example, asserts that since providers of Internet access are "not `telecommunications carriers' that provide universal service through their own facilities" pursuant to section 214(e), nor are they "'interstate telecommunications providers' under [s]ection 254(d)," they are not eligible to receive universal service support.<sup>1119</sup> PacTel agrees and quotes section 254(e), which states that "only an eligible telecommunications carrier designated under [s]ection 214(e) shall be eligible to receive specific Federal universal service

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<sup>1114</sup> Cox comments at 10-11.

<sup>1115</sup> Cox comments at 10-11.

<sup>1116</sup> EDLINC reply comments at 4-5.

<sup>1117</sup> EDLINC reply comments at 4-5. *See also* Cox comments at 10-11 (stating that the "provision of advanced services, by either a telecommunications carrier or by a non-carrier, will not create any obligation to make universal service payments, leaving both carriers and non-carriers on an equal footing"); GI reply comments at 4 (stating that "payments for the fund for the provision of advanced service by either telecommunications carriers or non-carriers *would have no bearing on assessments for contributions to the fund*").

<sup>1118</sup> *See, e.g.,* Ameritech comments at 18-19; AT&T comments at 20; Bell Atlantic comments at 21; BellSouth comments at 25-28; Citizens Utilities comments at 13-14; MCI comments at 18; NYNEX comments at 40; PacTel comments at 39; SBC comments at 46; BANX reply comments at 19.

<sup>1119</sup> NYNEX comments at 40. *See also* Bell Atlantic comments at 21 n.81 (*citing* 47 U.S.C. § 254(e)).

support."<sup>1120</sup> SBC contends that providing universal service support for non-telecommunications carriers raises such administrative problems as requiring the universal service administrator to oversee a large number of service providers and to monitor those non-regulated providers for potential fraud and abuse.<sup>1121</sup>

281. NYNEX notes that allowing non-telecommunications providers, such as Internet service providers, to draw from universal service support mechanisms without requiring them to contribute is also inconsistent with the concept of competitive neutrality.<sup>1122</sup> PacTel asserts that "[c]ompetitively neutral rules require that the category of service providers and services that receive support be the same as the category of service providers and services that provide support. Otherwise, one type of provider and service would be favored over another."<sup>1123</sup> Netscape states that "[p]roper universal service policy for K-12 schools and libraries compels that all communications providers - regardless of regulatory classification - both contribute to and receive support from a 'universal' universal service support system."<sup>1124</sup> Netscape states further that a situation in which competitors, such as telecommunications carriers and Internet service providers, have differing universal service payment obligations "is precarious, at best, and open to substantial legal challenge, at worst."<sup>1125</sup>

282. Some commenters further assert that allowing non-telecommunications carriers to draw from universal service support mechanisms without also requiring them to contribute to those mechanisms would violate the United States Constitution.<sup>1126</sup> SBC, for example, characterizes such a contribution mechanism as a tax, since interstate telecommunications carriers would be contributing to a fund that would be used to compensate non-telecommunications carriers "to achieve educational goals unrelated to the regulation of

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<sup>1120</sup> PacTel comments at 38 (*quoting* 47 U.S.C. § 254(e)). *See also* SBC comments at 43 (stating that "[t]he Commission should reject universal service funding for internet access . . . as [s]ection 254 only allows support for 'telecommunications services' and funding to be received by either eligible carriers (under [s]ection 254(e)) or carriers (under [s]ection 254(h))").

<sup>1121</sup> SBC comments at 49.

<sup>1122</sup> NYNEX comments at 40. *See also* AT&T comments at 20 (stating that "[s]ection 254(h)(2) does not otherwise expand the Commission's statutory license to apply the USF -- which is funded solely by telecommunications carriers -- to subsidize services other than telecommunications services")

<sup>1123</sup> PacTel comments at 39. *See also* SBC comments at 46 (asserting that "competitive neutrality is violated in that non-carriers can receive support but are not required to contribute to the fund").

<sup>1124</sup> Netscape comments at 7 (footnote omitted).

<sup>1125</sup> Netscape comments at 7.

<sup>1126</sup> *See, e.g.,* ALLTEL comments at 5; PacTel comments at 43; SBC comments at 46-49.

telecommunications."<sup>1127</sup> Because, under the Origination Clause of the United States Constitution,<sup>1128</sup> all federal taxes must originate in the United States House of Representatives, SBC maintains that telecommunications carriers' contributions to universal service support mechanisms would amount to an unconstitutional tax, and that all provisions of section 254 addressing schools and libraries would, therefore, comprise unconstitutional delegations of authority.<sup>1129</sup> SBC urges the Commission instead to interpret section 254(c)(3) and 254(h) narrowly to avoid constitutional problems.<sup>1130</sup>

283. PacTel notes that permitting non-telecommunications carriers to draw from universal service support mechanisms without requiring them to contribute "would create a new subsidy for Internet access providers without addressing the implicit subsidy that LECs provide to them through the Commission's Enhanced service providers ("ESPs") exemption from access charges."<sup>1131</sup> PacTel contends further that such an arrangement would violate sections 201, 202, and 254 of the Communications Act, and would also be "an unauthorized taking of LEC property in violation of the Act and of the Fifth and Fourteenth Amendments to the U.S. Constitution."<sup>1132</sup>

284. Some commenters assert that, if the Commission adopts the Joint Board's recommendation to permit non-telecommunications carriers to draw from universal service support mechanisms, such providers must be reclassified as telecommunications providers.<sup>1133</sup> Citizens Utilities states that such a reclassification would impose two new obligations upon such carriers: "(1) they would be required to contribute to universal service funding under [s]ection 254(d); and (2) they would be responsible for the payment of access charges, where their services are interexchange in nature, and reciprocal compensation, where their services are local

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<sup>1127</sup> SBC comments at 46-47. *See also* ALLTEL comments at 5 (stating that allowing non-telecommunications carriers to collect from universal service support mechanisms "removes the taxing authority from the legislative branch"); Georgia PSC reply comments at 25-26 (concurring with SBC's analysis and stating that universal service support for schools and libraries "can be made available through other, more appropriate methods than redefining telecommunications services and imposing what amounts to an additional tax in the absence of an express Congressional mandate"); PacTel reply comments at 18-19 (concurring with SBC's analysis and stating that "[t]o turn the Act into a tax measure -- by requiring one set of providers to pay into the fund and allowing an altogether different set of entities to take from it, as well as using the monies collected to support goods and services not regulated by the Commission -- thus is contrary to the will of Congress and must be rejected").

<sup>1128</sup> U.S. Const., Art. I, § 7, cl. 1.

<sup>1129</sup> SBC comments at 47.

<sup>1130</sup> SBC comments at 48.

<sup>1131</sup> PacTel comments at 41.

<sup>1132</sup> PacTel comments at 43.

<sup>1133</sup> *See* BellSouth comments at 26; Citizens Utilities comments at 14.



exchange in nature."<sup>1134</sup>

285. Some commenters address the Joint Board's recommendation that schools and libraries be permitted to secure discounts on Internet access bundled with a minimal amount of content, but only if that bundled offering represents the most cost-effective way for the school or library to gain access to the Internet.<sup>1135</sup> AOL recommends that the Commission eliminate any requirement that Internet access may be bundled with only minimal content in order to qualify for universal service discounts.<sup>1136</sup> AOL asserts that such a requirement is inconsistent with the legislative intent,<sup>1137</sup> impermissibly supports one model for providing information services over another,<sup>1138</sup> and needlessly restricts the range of service options available to schools and libraries.<sup>1139</sup> In addition, AOL recommends that the Commission replace the minimal content requirement with a per-subscription cap on fees for access to the Internet, regardless of whether that access is bundled with other content.<sup>1140</sup> A per-subscription cap, according to AOL, will provide basic conduit access for schools and libraries, will give schools and libraries maximum flexibility in selecting Internet Service Providers, and will be easy to administer.<sup>1141</sup> AOL states that the cap should be based on the average charge for Internet access, computed on a nationwide basis.<sup>1142</sup> Using several different methods of calculation, AOL estimates a current average rate of \$19.95 per month.<sup>1143</sup> Netscape states that a per-subscription cap "is a competitively neutral approach . . . far preferable to the creation of a new, factually incorrect and highly transitory system for classification of Internet providers as 'content' and so-called 'conduit' services."<sup>1144</sup> CNMI, however, opposes a per-subscription cap because it may not be adequate to support Internet access for schools and libraries in rural and insular areas and because such a cap may not be consistent with section 254's requirement that schools and libraries be provided with

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<sup>1134</sup> Citizens Utilities comments at 14.

<sup>1135</sup> *See, e.g.*, AOL comments at 2-6; Netscape comments at 6.

<sup>1136</sup> AOL comments at 2-6.

<sup>1137</sup> AOL comments at 3-4.

<sup>1138</sup> AOL comments at 4-5. *See also* EDLINC reply comments at 4 (stating that competitive neutrality requires that ISPs offering some bundled content as part of their basic Internet access be eligible for universal service support; to find otherwise would favor ISPs that offer strictly Internet access).

<sup>1139</sup> AOL comments at 6.

<sup>1140</sup> AOL comments at 6.

<sup>1141</sup> AOL reply comments at 8-9.

<sup>1142</sup> AOL comments at 7.

<sup>1143</sup> AOL reply comments at 7-8.

<sup>1144</sup> Netscape reply comments at 6.

affordable access to services eligible for universal service support.<sup>1145</sup>

286. Netscape suggests a modification to the minimal content requirement recommended by the Joint Board. Netscape contends that the conduit/content distinction is ambiguous and has no meaningful application in the Internet environment to the functionalities and services available today from Internet service providers and online service providers.<sup>1146</sup> As an alternative, Netscape recommends that Internet access (i.e., the transport function) be differentiated from Internet services (i.e., the enhanced communications function), and that only Internet access be eligible for universal service discounts. "Under this approach, any provider offering dedicated transport facilities (T-1, 56 Kbps, frame relay, etc.) linking a user to the Internet would be considered, to that extent, to be providing 'telecommunications services' subject to discount under [s]ection 254(h)."<sup>1147</sup> Netscape also states that competitive neutrality precludes extending discounts only to dedicated Internet access, since many Internet service providers and Online service providers offer primarily dial-up access. Netscape does, however, support greater discounts for high-bandwidth Internet access to encourage schools and libraries to adopt broadband network solutions.<sup>1148</sup>

### **c. Intra-School and Intra-Library Connections**

287. Numerous commenters support the inclusion of internal connections within the services eligible for the schools and libraries discount program.<sup>1149</sup> EDLINC, for example, agrees with the Joint Board that installation and maintenance of internal connections is a service under section 254(h)(1)(B).<sup>1150</sup> EDLINC states further that "[w]ithout internal connections, services cannot be delivered to classrooms, as contemplated by the legislation, making it impossible to fully integrate telecommunications into the curriculum."<sup>1151</sup> United States Senator

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<sup>1145</sup> CNMI reply comments at 8-9.

<sup>1146</sup> Netscape comments at 6.

<sup>1147</sup> Netscape comments at 6.

<sup>1148</sup> Netscape reply comments at 5.

<sup>1149</sup> See, e.g., AFT comments at 1; CNMI comments at 36; CTIA comments at 10; EDLINC comments at 3; Great City Schools comments at 2; ITI comments at 7; MassLibrary comments at 1; Mississippi comments at 4; NetAction comments at 6; New Jersey Advocate comments at 8-9; Oracle comments at 14-18; Owen J. Roberts School District comments at 1; People For comments at 10; TCI comments at 8-9; Charles S. Robb reply comments at 2; CWA reply comments at 3; GI reply comments at 2; Ohio PUC reply comments at 13-15; Vanderbilt reply comments at 3-4.

<sup>1150</sup> EDLINC comments at 3-4.

<sup>1151</sup> EDLINC comments at 3-4. See also Ohio PUC reply comments at 13 (stating that "the Joint Explanatory Statement made several reference to providing access to 'classrooms' and not just school buildings"); Vanderbilt reply comments at 3 (*quoting* Benton Foundation statement that "it is the clear intent of Congress to connect

Charles S. Robb commends the Joint Board for recommending that internal connections be eligible for universal service support and "encourage[s] the FCC to adopt this recommendation in its final rules in keeping with the spirit of the law to not only provide internet wiring to the school door, but to enable our schools to afford the internal connections for the classroom where the children need them."<sup>1152</sup> New Jersey Advocate maintains that "[t]he discounts for the provision of Internet access and telecommunications services [will] be meaningless if schools and libraries cannot afford the cost of wiring the facilities for access."<sup>1153</sup>

288. EDLINC also asserts that the inclusion of internal connections among the services eligible for universal support is competitively neutral, since wireless technologies are not favored over wireline technologies.<sup>1154</sup> CNMI maintains that the inclusion of internal connections is consistent with "section 254(h)(2)(A)'s far-reaching mandate" that the Commission establish rules that provide access to advanced telecommunications and information services for schools and libraries.<sup>1155</sup> Great City Schools contends that there is "no debate over legal authority" to include internal connections within the class of services eligible for universal service support.<sup>1156</sup>

289. ITI asserts that if the Commission decides to support internal connections, the principle of competitive neutrality requires that both telecommunications carriers and non-telecommunications carriers be eligible for universal service support.<sup>1157</sup> In addition, ITI asserts further that section 254(h)(2) provides the Commission with authority that is "separate and independent" from the authority granted through section 254(h)(1). ITI states that, "[b]ecause it is not so limited, [s]ection 254(h)(2) authorizes the Commission to establish a funding mechanism for reimbursement of both carriers and non-carriers who provide the advanced services identified by the Board."<sup>1158</sup> CTIA contends that the Commission should adopt a "flexible approach" that allows schools and libraries to use any type of internal connections,

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classrooms, not just to reach the school house door").

<sup>1152</sup> Charles S. Robb reply comments at 2.

<sup>1153</sup> New Jersey Advocate comments at 8.

<sup>1154</sup> EDLINC comments at 4.

<sup>1155</sup> CNMI comments at 36. *See also* AFT comments at 1 (including internal connections and Internet access among the services eligible for universal service discounts is "crucial to delivering education via advanced telecommunications to the broadest numbers of K-12 students and adult learners").

<sup>1156</sup> Great City Schools comments at 2.

<sup>1157</sup> ITI comments at 7 (assuming for the sake of argument that the Commission has the authority to include internal connections within the scope of eligible services).

<sup>1158</sup> ITI comments at 5.

including wireless LANs.<sup>1159</sup> CTIA maintains that such an approach will result in greater competition and lower prices, and will ensure that the limited universal service funds "are spent in the most efficient manner possible."<sup>1160</sup>

290. Oracle seeks clarification on two points regarding internal connections. First, Oracle asks that the Commission include file server software within the definition of internal connections eligible for universal service support. Oracle defines file server software as the software "used to configure, operate and manage computer network communications."<sup>1161</sup> Noting that network file servers are useless without the necessary software and that most file server hardware is sold bundled with software, Oracle argues that "the Commission should not attempt to disaggregate network file server hardware and software."<sup>1162</sup> Second, Oracle states that, to ensure both competitive and technological neutrality, the Commission should avoid "any limitation on the size and type of network file servers, routers and similar network technologies K-12 schools and libraries are permitted to deploy using universal service support funds."<sup>1163</sup> Oracle maintains that the marketplace, rather than Commission regulations, should determine the network architecture that schools and libraries select.<sup>1164</sup>

291. Numerous commenters argue that the Commission should decline to adopt the Joint Board's recommendation to include internal connections within the services eligible for universal service support.<sup>1165</sup> Some of these commenters contend that the Commission has no statutory authority to provide support for internal connections.<sup>1166</sup> For example, AT&T states

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<sup>1159</sup> CTIA comments at 10.

<sup>1160</sup> CTIA comments at 11.

<sup>1161</sup> Oracle comments at 16.

<sup>1162</sup> Oracle comments at 15-16.

<sup>1163</sup> Oracle comments at 17.

<sup>1164</sup> Oracle comments at 17-18.

<sup>1165</sup> *See, e.g.*, AirTouch comments at 18-19; ALTS comments at 17-18; Ameritech comments at 18-19; AT&T comments at 18; Bell Atlantic comments at 21; BellSouth comments at 25-28; California Dept. of Consumer Affairs comments at 25; Cincinnati Bell comments at 13-14; Frontier comments at 4, 13; GTE comments at 89-91; MCI comments at 18; MFS comments at 32; New York DOE comments at 7; NYNEX comments at 40; PacTel comments at 44; SBC comments at 46; SNET comments at 7; Sprint comments at 11-13; TURN comments at 9; USTA comments at 35-36; WorldCom comments at 28; Georgia PSC reply comments at 22-25; Motorola reply comments at 9, 13; PageMart reply comments at 3-4; PCIA reply comments at 6; UTC reply comments at 6-7.

<sup>1166</sup> *See, e.g.*, AirTouch comments at 18-19; ALTS comments at 17-18; Ameritech comments at 18-19; AT&T comments at 18; California Dept. of Consumer Affairs comments at 25; Cincinnati Bell comments at 13-14; Frontier comments at 4, 13; Sprint comments at 11-13; WorldCom comments at 28; GTE reply comments at 64; PCIA reply comments at 6.

that internal connections are not telecommunications services under section 254(c)(3), and that section 254(h)(2)(A)'s directive to adopt rules to enhance "access" to advanced telecommunications and information services does not expand the Commission's authority to provide universal service support to non-telecommunications services such as internal connections.<sup>1167</sup> California Dept. of Consumer Affairs maintains that "it would be wrong for the Commission to interpret a reference to `access' as Congress' grant of jurisdiction over inside wiring providers."<sup>1168</sup> Ameritech adds that "the `access to . . . information services' referred to in [section] 254(h)(2)(A) is most logically interpreted as applying to the network transmission components necessary for access to information services."<sup>1169</sup>

292. Ameritech also states that because internal connections are not telecommunications services, but rather customer premises equipment (CPE), they are clearly not eligible for universal service support.<sup>1170</sup> AirTouch adds that the Recommended Decision does not provide a "workable standard" for differentiating among file servers eligible for universal service support as internal connections and personal computers ineligible for support, and concludes that funding internal connections would both violate section 254 and be "administratively unworkable."<sup>1171</sup> WorldCom asserts that "[h]owever laudable the Joint Board's goals may be in this area, the Commission appears to lack the statutory authority to require universal service funding of inside wiring that constitutes unregulated plant or equipment, not a telecommunications service."<sup>1172</sup> UTC adds that "[w]hile the Joint Board's characterization of internal connections as a type of service may be accurate, this is not dispositive" because services eligible for universal service support must be telecommunications services.<sup>1173</sup> GTE maintains that providing universal service support for internal connections is inconsistent with

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<sup>1167</sup> AT&T comments at 20.

<sup>1168</sup> California Dept. of Consumer Affairs comments at 29.

<sup>1169</sup> Ameritech reply comments at 4. *See also* BellSouth reply comments at 12 (stating that section 254(h)(2) provides only for "access" to advanced telecommunications and information services and does not contemplate inclusion of the services themselves among the services eligible for universal service support); Georgia PUC reply comments at 24-25 (stating that section 254(h)(2) addresses only competitively neutral rules to enhance "access" to advanced telecommunications and information services).

<sup>1170</sup> Ameritech comments at 19. *See also* AirTouch comments at 21 (stating that the Recommended Decision's "reliance on the term `access' to justify supporting internal connections is a `slippery slope,' providing no fundamental standard to judge what equipment or services should or should not be supported" (footnote omitted, citing Commissioner Chong's statement concurring with the Joint Board's Recommended Decision); Cincinnati Bell comments at 13-14 (stating that "[a]s Commissioner Chong and Commissioner Schoenfelder observe, as well as Representative Jack Fields, inside wire is plant and equipment, not a telecommunications service and as such is beyond the Congressional mandate of providing discounted *service* to schools and libraries") (footnote omitted).

<sup>1171</sup> AirTouch reply comments at 30.

<sup>1172</sup> WorldCom comments at 28.

<sup>1173</sup> UTC reply comments at 6-7.

the Commission's previous classification of inside wiring and CPE as non-common carrier services under Title II that are not subject to Commission regulation.<sup>1174</sup>

293. Numerous commenters contend that permitting non-telecommunications carriers that install and maintain internal connections to draw from universal service support mechanisms violates section 254.<sup>1175</sup> Commenters provide essentially the same arguments that they make regarding the inclusion of Internet access among the services eligible for universal service support.<sup>1176</sup> NYNEX, for example, states that providers of internal connections are neither eligible telecommunications providers under section 214(e), nor are they interstate telecommunications providers under section 254(d).<sup>1177</sup> BellSouth contends that providers of internal connections can collect universal service support only if the Commission reclassifies the providers as telecommunications carriers and internal connections as telecommunications services, "thus ignoring its historical treatment of such services and connections as well as these statutory definitions."<sup>1178</sup> Bell Atlantic maintains that the Commission must limit the entities that can be reimbursed for providing internal connections to telecommunications carriers only.<sup>1179</sup>

294. Some commenters maintain that including internal connections within the services eligible for universal service support would either greatly increase the magnitude of universal service support mechanisms or would rapidly deplete the available funds.<sup>1180</sup> TURN contends that the size of universal service support mechanisms would have to increase by billions of dollars if internal connections were eligible for support.<sup>1181</sup> TURN also maintains that

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<sup>1174</sup> GTE comments at 89-91 and n.140 (*citing* prior Commission decisions). *See also* UTC reply comments at 7 (stating that "[t]he Commission has explicitly ruled that the installation and maintenance of inside wiring are not common carrier communications services").

<sup>1175</sup> *See, e.g.*, Ameritech comments at 18; AT&T comments at 20; Bell Atlantic comments at 21; BellSouth comments at 25-28; MCI comments at 18; NYNEX comments at 40; PacTel comments at 44; SBC comments at 46; BANX reply comments at 19.

<sup>1176</sup> *See supra* paras. 24 - 26.

<sup>1177</sup> NYNEX comments at 40. *See also* Bell Atlantic comments at 21 n.81; PacTel comments at 38; SBC comments at 43.

<sup>1178</sup> BellSouth comments at 26.

<sup>1179</sup> Bell Atlantic comments at 21. *See also* MCI comments at 18 (asserting that "non-telecommunications carriers are not eligible under the Act for reimbursement").

<sup>1180</sup> *See, e.g.*, AT&T comments at 18; Citizens Utilities comments at 15; GTE comments at 96; MFS comments at 32; New York DOE comments at 7; TURN comments at 10; USTA comments at 35-36; WorldCom comments at 28; PCIA reply comments at 12.

<sup>1181</sup> TURN comments at 10. *See also* Citizens Utilities comments at 15 (stating that "support of *any* internal connections will load significant costs upon the universal service system that are not contemplated under the statute"); GTE comments at 96 (stating that "the potentially immense financial ramifications of including inside

the impact would be felt by telecommunications consumers because carriers would have to raise rates. TURN further avers that "[t]his would place the Commission's mandate to improve affordability and advance universal service in jeopardy."<sup>1182</sup> New York DOE notes that "[w]hile the intent of the Joint Board recommendations for supporting discounts for inside wiring is laudable, it may not be practical because costs for this purpose could quickly deplete a capped national fund."<sup>1183</sup> New York DOE also maintains that some schools may choose very sophisticated configurations for internal connections, placing a disproportionate burden on the fund and taking support away from the most needy schools and libraries.<sup>1184</sup> PageMart adds that providing universal service support for internal connections would "not [be] economically reasonable as required by [s]ection 254(h)(2)(A)."<sup>1185</sup>

295. Some commenters assert that including internal connections among the services eligible for universal service support would not serve the public interest because, for example, it would seriously disrupt the competitive market that now exists for internal connections.<sup>1186</sup> AirTouch, for example, notes that because the internal connections market is nonregulated and highly competitive, providing universal service support for internal connections "is likely to place significant burdens upon other telecommunications consumers: both the direct burdens of the taxes used to fund such subsidies and in indirect efficiency costs that will be triggered by the collection of such subsidies."<sup>1187</sup> Cincinnati Bell contends that "since inside wire has been deregulated for some time and the market is clearly competitive, schools have opportunities to solicit bids from many different providers and to negotiate for discounts to meet their needs. In short, there is no need for subsidies for inside wire."<sup>1188</sup> GTE maintains that because many internal connections providers would not meet the Act's definition of telecommunications carrier, their service would not be eligible for universal service support. The result would be that eligible telecommunications carriers would have a competitive advantage over these other,

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wiring in the educational support fund cut against the Board's decision"); USTA comments at 35 (citing Commissioner Chong's concurring statement for the premise that "inclusion of internal connections will cause the fund to balloon to a level much higher than may be fiscally prudent, at the expense of all consumers of telecommunications services").

<sup>1182</sup> TURN comments at 10. *See also* Sprint comments at 13-14 (stating that "[t]he Commission should be keenly aware that there is no such thing as free money, and that the costs of the proposed multi-billion dollar subsidy will ultimately be borne by consumers of telecommunications services generally").

<sup>1183</sup> New York DOE comments at 6.

<sup>1184</sup> New York DOE comments at 7.

<sup>1185</sup> PageMart reply comments at 4.

<sup>1186</sup> *See, e.g.,* AirTouch comments at 20; Cincinnati Bell comments at 14; GTE comments at 93-94.

<sup>1187</sup> AirTouch comments at 20 (footnote omitted).

<sup>1188</sup> Cincinnati Bell comments at 14.

full-priced competitors in the internal connections market.<sup>1189</sup> AT&T, on the other hand, asserts that non-telecommunications carriers providing internal connections would have a competitive advantage over telecommunications carriers providing internal connections because only the telecommunications carriers will contribute to universal service support mechanisms and large portions of the funding will likely flow to the non-telecommunications carriers. AT&T contends that such a result would not be competitively neutral.<sup>1190</sup>

296. Some commenters assert that providing universal service support for internal connections violates the principle of technological neutrality.<sup>1191</sup> GTE, for example, asserts that the inclusion of internal connections within the services eligible for universal service support violates this principle because it "target[s] a subsidy (inside wiring support) to a characteristic (wiring) unique to a particular technology (wireline services)."<sup>1192</sup> Motorola agrees with GTE's analysis and adds that "the inclusion of internal connections in the universal service support program ignores the existence of cost-effective wireless alternatives."<sup>1193</sup>

297. Finally, some commenters maintain that, if universal service support is provided for internal connections, the owner of those internal connections should not be permitted to restrict access to them.<sup>1194</sup> If one provider receives universal service support funds to supply internal connections to a school or library, WinStar asserts that that provider may not then restrict access to the internal connections if the school or library chooses another provider to supply its telecommunications services or Internet access. WinStar maintains that the Commission should condition the receipt of universal service funds on the requirement that the

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<sup>1189</sup> GTE comments at 94.

<sup>1190</sup> AT&T comments at 20. *See also* Ameritech comments at 18 (stating that "[t]he principle of competitive neutrality would be violated if providers who are not required to contribute toward the preservation of universal service were permitted to receive disbursements from the fund"); NYNEX comments at 40 (asserting that "it is not clear how allowing a provider to receive universal service support, without requiring it to contribute to the fund as will telecommunications carriers that provide inside wiring . . . is consistent with the concept of competitive neutrality"); PacTel comments at 46-47 (stating that "[r]ather than ensuring competitive neutrality, the Board has established a system in which telecommunications carriers must pay into the fund to subsidize non-telecommunications carriers whose inside wiring and CPE will be provided to schools and libraries"); Georgia PSC reply comments at 23 (stating that "just one of the resulting problems will be a violation of the principle of 'competitive neutrality,' because non-telecommunications carriers would be eligible to receive fund subsidies even though they would not be obliged to participate in contributing to the fund").

<sup>1191</sup> *See, e.g.*, GTE comments at 95; Motorola reply comments at 15-16.

<sup>1192</sup> GTE comments at 95.

<sup>1193</sup> Motorola reply comments at 15.

<sup>1194</sup> *See, e.g.*, MFS comments at 32-33; WinStar comments at 7-9; WorldCom comments at 29.



installer or owner not restrict access.<sup>1195</sup> Similarly, if the internal connections are already in place, WinStar contends that the owner should not be permitted to prevent the school or library from choosing another provider for its telecommunications services or Internet access. If a telephone carrier owns the internal connections and currently has a tariff for those connections, it should be compensated for the use of those connections at the schools' and libraries' discounted rate and be permitted to recover the rest of the tariffed rate from the universal service support mechanism.<sup>1196</sup> If the owner does not currently charge for the use of the internal connections, WinStar asserts that it should not be permitted to begin charging if the school or library selects an alternate service provider.<sup>1197</sup>

## **C. Discount Methodology**

### **1. Comments**

#### **a. Pre-Discount Price**

298. Competitive Environment. Numerous commenters support the Joint Board's recommendation that schools and libraries be required to participate in a competitive bidding process in which requests for proposals (RFPs) will be posted on a website.<sup>1198</sup> Ameritech, for example, contends that the competitive bidding process "should encourage widespread participation and aggregation of demand, thus facilitating economic efficiency and reducing administrative costs."<sup>1199</sup> BellSouth asserts that competitive bidding and posting RFPs on a website "will ensure that many providers will have the opportunity to submit bids, and, thus, brings to the process many benefits which can be gained through the natural operation of competitive forces."<sup>1200</sup>

299. Several commenters raise issues that they contend must be clarified so that the

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<sup>1195</sup> WinStar comments at 8. *See also* MFS comments at 32-33 (asserting that the Recommended Decision should be clarified to indicate that internal connections subsidized by universal service funds must be made available to any competing service providers a school or library may select); WorldCom comments at 29 (stating that "[t]he ILECs cannot be subsidized by other carriers to provide physical plant, and then deny those same carriers access to that wiring").

<sup>1196</sup> WinStar comments at 8. *See also* MFS comments at 33 (stating that "the owner of the inside wire should not be allowed to prohibit competitors from using the inside wiring to provide subsidized services, and should provide the inside wiring at the tariffed rates less the applicable 20-90% discount").

<sup>1197</sup> WinStar comments at 8-9.

<sup>1198</sup> *See, e.g.,* Ameritech comments at 20; BellSouth comments at 29; GTE comments at 97; MCI comments at 16-17; Seattle comments at 2; Teleport comments at 9; Motorola reply comments at 9, 13.

<sup>1199</sup> Ameritech comments at 19-20.

<sup>1200</sup> BellSouth comments at 29.

competitive bidding process can operate smoothly. Nextel and other commenters contend, for example, that the Commission's competitive bidding rules must state that schools and libraries need not select the provider that submits the lowest bid. These commenters argue that schools and libraries should be permitted the flexibility to determine which bid best fits their particular requirements.<sup>1201</sup> AOL recommends that the Commission clarify that schools and libraries may consider such factors as amount of classroom down time, quality connections, and customer support services, in addition to the price of service, when determining which Internet subscription charge is the most cost-effective. AOL states that the alternative, which would require schools and libraries to accept the lowest bid for Internet access, would provide schools and libraries with no flexibility to choose services that best meet their needs.<sup>1202</sup> Community Colleges states that "[q]uality concerns must be recognized in the competitive bidding process to ensure that schools are not relegated to take service from unreliable carriers simply because they outbid competitors."<sup>1203</sup>

300. Other commenters contend that potential service providers participating in the schools and libraries competitive bidding process should be required to submit "unbundled" bids that identify the costs of all covered services separately.<sup>1204</sup> Community Colleges asserts, for example, that providers of such services as Internet access and internal connections need not also provide the whole bundle of services that a school or library seeks in order to collect from universal service support mechanisms.<sup>1205</sup> Nextel asserts that an unbundling requirement would permit new entrants, such as wireless service providers, to compete to provide advanced

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<sup>1201</sup> See, e.g., AOL comments at 8; Community Colleges comments at 16-17; iSCAN comments at 3-4; Nextel comments at 11-12; PacTel comments at 49-50; U S WEST comments at 47-48; GI reply comments at 5.

<sup>1202</sup> AOL comments at 8.

<sup>1203</sup> Community College comments at 17. See also EDLINC comments at 10 n.10 (stating that "schools and libraries should be free to reject low bidders on grounds permitted by local procurement rules, such as a past record of poor performance"); iSCAN comments at 3 (stating that schools and libraries should be able to make their final choice of service providers based on price and quality); PacTel comments at 49-50 (stating that schools and libraries should be permitted to select service providers based on attributes other than price, such as quality, reliability, and service); U S WEST comments at 47-48 (stating that "if a particular school's procurement processes allow it to take into account factors other than price (e.g., reliability of provider or value add-ons) in choosing among competing bids, the Commission should not invalidate those requirements or rules by mandating that the school accept the lowest bid price"); GI reply comments at 5 (stating that "[s]chools should be allowed to choose the service provider they believe offers them the most for their money, which may or may not be the lowest bidder"). But see GCI reply comments at 13 (stating that the Commission should require schools and libraries to accept the lowest bid).

<sup>1204</sup> See, e.g., ALTS comments at 16; Community Colleges at 15; Cox at 13; Nextel comments at 12-13; Time Warner comments at 11; WinStar comments at 3, 10. See also NCTA comments at 18 (supporting use of separate RFPs).

<sup>1205</sup> Community Colleges comments at 13-14.

services.<sup>1206</sup> WinStar maintains that "[s]uch an unbundling would maximize the number of competitors who could respond to RFPs and thereby maximize competition for the provision of supported services."<sup>1207</sup> ALTS maintains that "[i]f the services were not bid separately, joint marketers would have an unfair competitive advantage."<sup>1208</sup> NCTA notes that maximizing the number of competing bidders will result in a lower pre-discount price for schools and libraries. NCTA also notes that the use of separate RFPs for individual service offerings such as telecommunications services and internal connections "will reduce the opportunities for ILECs to make non-compensatory, cross-subsidized low bids for particular competitive components of an RFP and to make up the difference by undetected higher prices charged for monopoly services in a 'package' RFP."<sup>1209</sup>

301. GTE and SBC raise a potential conflict between the Joint Board's recommended competitive bidding requirement and existing federal tariff restrictions applicable to ILECs.<sup>1210</sup> SBC maintains that, at the present time, ILECs are limited to providing services under publicly available tariffed rates and because competitors will know precisely what an ILEC is required to bid, competitors will underbid and effectively exclude ILECs from providing services to the lucrative schools and libraries market. GTE asserts that such a result would be contrary to the intent of the Recommended Decision, which contemplates a competitive bidding process open to all carriers.<sup>1211</sup> GTE and SBC state that they have attempted to have their tariff restrictions revised to allow them to respond to competitive bid requests with other than tariffed rates, but that the Commission has rejected their attempts.<sup>1212</sup> These carriers also note that the Court of Appeals recently remanded SBC's tariff to the Commission for further consideration because of the Commission's refusal to consider the issue of "competitive necessity."<sup>1213</sup> GTE urges the Commission to consider the issue of "competitive necessity" in the context of ILECs providing services to schools and libraries, and emphasizes that the principle of competitive neutrality

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<sup>1206</sup> Nextel comments at 12-13.

<sup>1207</sup> WinStar comments at 3. *Cf.* Community Colleges comments at 15 ("[p]ermitting such bundling, without a requirement to submit independent bids for particular services, will restrict the meaningful choice of schools and libraries to take service from those entities that may more efficiently provide advanced services (*e.g.*, wireless providers, cable providers") (footnote omitted).

<sup>1208</sup> ALTS comments at 16.

<sup>1209</sup> NCTA comments at 21.

<sup>1210</sup> *See* GTE comments at 97-98; SBC comments at 39-41.

<sup>1211</sup> GTE comments at 98.

<sup>1212</sup> GTE comments at 97 (*citing Southwestern Bell Telephone Co.*, 11 FCC Rcd 1215 (1995) and *GTE Telephone Operating Cos.*, 11 FCC Rcd 3698 (1995) *appl. for rev. pending*); SBC comments at 40.

<sup>1213</sup> GTE comments at 97-98 (*citing Southwestern Bell Telephone Company v. FCC*, Case. No. 95-1592 (D.C. Cir. Nov. 26, 1996); SBC comments at 40 (same).

requires that tariff relief be adopted before any universal service competitive bidding requirement is adopted.<sup>1214</sup> SBC states that "[b]y effectively excluding incumbent LECs from providing service to schools and libraries without any explanation whatsoever, the Joint Board has recommended an approach that is unreasonable, arbitrary, and otherwise unlawful."<sup>1215</sup>

302. USTA and EDLINC maintain that the Commission must clarify the obligations of carriers of last resort, in the event that a school or library issues an RFP and receives no bids.<sup>1216</sup> EDLINC states that "[t]here must either be a carrier of last resort that will provide the requested services at an affordable rate, or all service providers serving the geographic area must be under an affirmative obligation to submit their LCPs [lowest corresponding prices] in response to an RFP."<sup>1217</sup> USTA contends that the Commission must clarify "how the obligation of carriers of last resort mesh with the new universal service requirements."<sup>1218</sup>

303. Commenters raise several other issues regarding the competitive bidding requirement. NASTD expresses the concern that posting descriptions of services on a website for the purpose of soliciting competitive bids may not comply with the procurement code with which state and local government entities must comply.<sup>1219</sup> GTE states that, if the website arrangement does not permit electronic searches or automatic retrieval of bid requests, "schools and libraries should be required to provide other forms of notification to maximize the number of bids."<sup>1220</sup> NCTA asserts that requiring schools and libraries to publish notice of their service requests in their local daily newspapers for some reasonable period of time would give all potential service providers equal opportunity to bid and would increase the number of bids received by schools and libraries. According to NCTA, "[g]iven the magnitude of the support at issue and the potential for lower prices resulting from more bidders, the expense of such newspaper publication will be *de minimis*."<sup>1221</sup> BellSouth maintains that the website could be used to post both bids and the assignment of discounts, so that carriers could verify the discount that applies to each school and library.<sup>1222</sup> TCI recommends requiring vendors to submit their

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<sup>1214</sup> GTE comments at 98. *See also* SBC comments at 40 (requiring ILECs to comply with tariff restrictions in the context of competitive bidding is not competitively neutral).

<sup>1215</sup> SBC comments at 41.

<sup>1216</sup> USTA comments at 53; EDLINC reply comments at 9-10.

<sup>1217</sup> EDLINC reply comments at 6-10.

<sup>1218</sup> USTA comments at 38.

<sup>1219</sup> NASTD comments at 4-5.

<sup>1220</sup> GTE comments at 100.

<sup>1221</sup> NCTA reply comments at 17.

<sup>1222</sup> BellSouth comments at 30.

qualifications and demonstrate that they have both the resources and the experience to provide the requested services.<sup>1223</sup> Vermont PSB asserts that a competitive bid process is not necessary to stimulate competition, and, because of the administrative burden, recommends that the Commission adopt a waiver for schools and libraries with fewer than ten access lines.<sup>1224</sup> Teleport and NCTA support limiting competitive bidding to one round of sealed bids, in order to minimize the burden imposed on schools and libraries,<sup>1225</sup> while EDLINC asserts that the Commission should permit local conditions to prevail to determine bidding structure.<sup>1226</sup>

304. Numerous commenters support the Joint Board's recommendation to allow schools and libraries to participate in consortia with both eligible and ineligible entities for the purpose of aggregating demand.<sup>1227</sup> EDLINC and Washington UTC, for example, agree with the Joint Board's conclusion that denying schools and libraries the efficiencies that would result from participating in consortia would not be in the public interest.<sup>1228</sup> Washington UTC also agrees with the Joint Board's conclusion that the benefits of participating in consortia far outweigh the potential of abuse, stating that "[i]t is absolutely essential that schools, libraries and other public facilities participate in community-based demand aggregation efforts to ensure that advanced network services are available to all Americans."<sup>1229</sup> BellSouth asserts that the market power generated by consortia may result in making services affordable without the assistance of universal service support, and suggests that the Commission consider modifying the Joint Board's recommendations regarding consortia to reflect this significant market power.<sup>1230</sup>

305. Lowest Price Charged to Similarly Situated Non-Residential Customers for Similar Services. Numerous commenters note that using the lowest price charged to similarly situated non-residential customers for similar services ("lowest corresponding price") to

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<sup>1223</sup> TCI comments at 10.

<sup>1224</sup> Vermont PSB comments at 18.

<sup>1225</sup> NCTA comments at 22; Teleport comments at 9; GCI reply comments at 14.

<sup>1226</sup> EDLINC reply comments at 12.

<sup>1227</sup> See, e.g., ALA comments at 9; Alliance for Community Media comments at 10; BellSouth comments at 39-40; Community Colleges comments at 21; EDLINC comments at 5; Florida Dept. of Management Services comments at 1-2; Georgia Dept. of Administrative Services comments at 2; MassLibrary comments at 1; Washington Library comments at 8; Washington UTC comments at 8-9.

<sup>1228</sup> EDLINC comments at 5; Washington UTC comments at 8.

<sup>1229</sup> Washington UTC comments at 8-9.

<sup>1230</sup> BellSouth comments at 39-40.

determine the pre-discount price is a concept that requires clarification.<sup>1231</sup> Some commenters address the question of defining what constitutes a "similarly situated non-residential customer."<sup>1232</sup> ALA, for example, contends that the definition of a similarly situated non-residential customer should not be so narrow as to exclude comparable customers whose situations differ only marginally from an eligible school or library. ALA asserts that "[d]ifferences in situation should be limited to those factors that demonstrably and significantly impact the direct cost of providing a service in one area versus another and/or one customer versus another."<sup>1233</sup> USTA asks the Commission to clarify that a carrier need only consider one of its own similarly situated customers, rather than the customer of another carrier, to determine the pre-discount price to be offered to schools and libraries.<sup>1234</sup> Ameritech asserts that a school or library would not be similarly situated to a customer in the latter years of a multi-year contract, and that the lowest corresponding price should be based on a recently charged rate.<sup>1235</sup> NTIA asserts that state public service commissions are better positioned to ascertain lowest corresponding prices because they interact with customers on a daily basis and are better able to make the necessary factual determinations.<sup>1236</sup>

306. EDLINC maintains that carriers should not be permitted to consider such factors as length of contract and proximity to switching facilities to determine whether a non-residential customer is similarly situated to a school or library. EDLINC maintains that, instead, the concept of similarly situated non-residential customer should be simplified to mean a user of roughly equivalent volume to that of an eligible school or library, and that the pool of similarly situated customers should include both eligible schools and libraries and ineligible entities.<sup>1237</sup> To allow carriers to apply a broad range of factors in setting prices, according to EDLINC, will

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<sup>1231</sup> See, e.g., ALA comments at 14; Ameritech comments at 20; Brooklyn Public Library comments at 2-3, 6-7; Community Colleges comments at 15-16; Cox comments at 11; MCI comments at 17; New Jersey Advocate comments at 8; PacTel comments at 48-50; SBC comments at 41-42; USTA comments at 37-39; U S WEST comments at 48; WinStar comments at 11-12. *But see* EDLINC comments at 6-7 (supporting use of a national benchmark pre-discount price); CEDR comments at 14 (same).

<sup>1232</sup> See, e.g., ALA comments at 14; Ameritech comments at 20; Brooklyn Public Library comments at 2-3; EDLINC comments at 8-9; USTA comments at 37-39. *But see* New Jersey Advocate comments at 8 (stating that carriers should be required to provide services to schools and libraries at rates no higher than rates charged to *residential* customers for equivalent services).

<sup>1233</sup> ALA comments at 14.

<sup>1234</sup> USTA comments at 37-39.

<sup>1235</sup> Ameritech comments at 20.

<sup>1236</sup> NTIA reply comments at 23.

<sup>1237</sup> EDLINC comments at 8-9. *See also* NTIA reply comments at 23 (finding "merit in EDLINC's 'volume of usage' criterion").

subvert the entire lowest corresponding price mechanism.<sup>1238</sup> Recognizing EDLINC's concern that prices differ from location to location and carrier to carrier, SBC opposes EDLINC's proposal and states that there are legitimate reasons, including costs and state regulatory policies, that account for those differences in prices.<sup>1239</sup> Ameritech asserts that a requirement to ignore distance factors would be misdirected because "distance is a primary factor in determining differences in nontraffic sensitive costs in many cases."<sup>1240</sup>

307. While maintaining that the concept of lowest corresponding price needs clarification, EDLINC continues to assert that the use of a nationally based pre-discount price is the better approach. EDLINC contends that a national pre-discount price "would ensure that rates are not computed from an artificially high base and help ensure that the final discounted rate is as low as possible" and "would allow establishment of uniform rates for the same service, thus putting schools and libraries on a more equal footing."<sup>1241</sup> SBC also states that adopting EDLINC's proposal to establish a national benchmark pre-discount price would violate section 254(h)(1)(B) of the Act.<sup>1242</sup> Furthermore, Ameritech asserts that "in cases in which the national benchmark rate is not compensatory for the particular carrier, there would be unlawful confiscation."<sup>1243</sup>

308. ALA seeks clarification on the concept of "similar services."<sup>1244</sup> ALA recommends that the Commission clarify that services that are otherwise similar are not made dissimilar simply because one is offered under contract and the other under tariff. ALA maintains that this clarification would be consistent with the Joint Board's recommendation that schools and libraries be afforded maximum flexibility in selecting the package of services that best meets their needs. According to ALA, such a definition "also maximizes the number of choices available to libraries thereby promoting a more competitive environment and efficient

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<sup>1238</sup> EDLINC reply comments at 6.

<sup>1239</sup> SBC reply comments at 22. *See also* PacTel reply comments at 26 (supporting the Joint Board's recommendation to base the pre-discount price on the amounts charged for similarly situated non-residential customers for similar services and stating that "[c]ontrary to EDLINC's view, this formulation may give rise to regional differences that cause the LCP [lowest corresponding price] to differ within a carrier's service area").

<sup>1240</sup> Ameritech reply comments at 6. *See also* BANX reply comments at 21-22 (stating that EDLINC's proposal should be rejected and that the lowest corresponding price should be "based on all factors that affect the cost of service").

<sup>1241</sup> EDLINC comments at 6.

<sup>1242</sup> SBC reply comments at 22.

<sup>1243</sup> Ameritech reply comments at 6 (also stating that because carriers would not receive explicit support for the difference between their own lowest corresponding price and a national benchmark price, "the difference would be maintained as an implicit subsidy and is clearly inappropriate").

<sup>1244</sup> ALA comments at 14.

use of funds."<sup>1245</sup>

309. Some commenters seek clarification on the length of time that a particular lowest corresponding price would remain in effect.<sup>1246</sup> USTA asserts that the lowest corresponding price applicable within 12 months of the bid should be used to compute the bid price, and that lowest corresponding price should remain in effect for the life of the contract.<sup>1247</sup> EDLINC agrees, but maintains that the applicable time period should be 24 months, "to make it more likely that there will be a contract that applies to a particular service and similarly situated customer."<sup>1248</sup> When the contract is renegotiated, USTA contends that a new lowest corresponding price should be calculated based on current market conditions.<sup>1249</sup> PacTel concurs and maintains that the school or library contract price should remain fixed at no more than the lowest corresponding price at the time the contract is signed. The contract price should not be affected by subsequent fluctuations up or down in the prices charged to others.<sup>1250</sup>

310. Several commenters address what constitutes "geographic area" for purposes of determining the lowest corresponding price.<sup>1251</sup> Community Colleges, for example, supports the Joint Board's recommendation that geographic area means the area in which the service provider is seeking to serve customers. Community Colleges asserts that this definition of geographic area "will create meaningful opportunities for new service providers to gain economic footholds in new markets" and will "prevent the unnecessary exclusion of new entrants that are unable to provide services throughout an incumbent LEC's entire service area."<sup>1252</sup> Cox recommends that the Commission more narrowly define geographic area to encompass a school district because the smaller the service area, the larger number of service providers that will be likely to bid to provide services to schools and libraries.<sup>1253</sup> PacTel interprets the definition of geographic area to permit a carrier to consider geographic price differences when calculating the lowest

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<sup>1245</sup> ALA comments at 14.

<sup>1246</sup> *See, e.g.*, PacTel comments at 48-49; USTA comments at 37-39; EDLINC reply comments at 10.

<sup>1247</sup> USTA comments at 37-39.

<sup>1248</sup> EDLINC reply comments at 10.

<sup>1249</sup> USTA comments at 37-39.

<sup>1250</sup> PacTel comments at 48-49.

<sup>1251</sup> *See, e.g.*, Ameritech comments at 21; Community Colleges comments at 15-16; Cox comments at 11; PacTel comments at 49; SBC comments at 41; BANX reply comments at 22.

<sup>1252</sup> Community Colleges comments at 15-16. *See also* EDLINC comments at 10 (supporting the Joint Board's recommendation regarding geographic area and stating that the definition will only be relevant in limited circumstances).

<sup>1253</sup> Cox comments at 11.



corresponding price, and therefore does not require carriers to offer the same lowest corresponding price to all schools and libraries in its service area. PacTel maintains that requiring a carrier to offer the same lowest corresponding price to all schools and libraries in its service area, regardless of price differences, would be "irrational and perhaps confiscatory."<sup>1254</sup>

311. Some commenters consider the application of lowest corresponding price to areas in which there is no competition.<sup>1255</sup> USTA seeks clarification on how the lowest corresponding price concept will apply when there is no competition and how the obligations of carriers of last resort interact with universal service obligations.<sup>1256</sup> MCI and EDLINC maintain that TSLRIC should apply in non-competitive markets,<sup>1257</sup> while BANX and SBC contend that using TSLRIC to determine the pre-discount price would violate section 254(h)(1)(B).<sup>1258</sup> PacTel asserts that the lowest tariff rate in the county in which a school or library is located should constitute the lowest corresponding price in such situations, unless a cost-based agreement would produce a lower price.<sup>1259</sup> PacTel also asks that the Commission clarify that carriers may rely on existing tariffs, rather than being required to file new tariffs, to determine the lowest corresponding price for services provided to schools and libraries.<sup>1260</sup>

312. Other commenters oppose the use of the lowest corresponding price to determine the pre-discount price for schools and libraries.<sup>1261</sup> U S WEST maintains, for example, that because a carrier may not charge for some services, calculating the lowest corresponding price

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<sup>1254</sup> PacTel comments at 49 (noting that the lowest corresponding price determines the rate of reimbursement from universal service support mechanisms, and if the lowest corresponding price is below cost, it would be confiscatory). *See also* SBC comments at 41 (stating that "[i]f the LCP [lowest corresponding price] concept is implemented across a broad geographic area, where costs can vary significantly, then carriers are penalized for serving broad geographic areas," resulting in carriers not being able to recover costs in high cost areas); BANX reply comments at 22 (agreeing with PacTel that requiring a carrier to offer the same lowest corresponding price throughout its service area would be "irrational, and perhaps confiscatory").

<sup>1255</sup> *See, e.g.*, MCI comments at 17; PacTel comments at 50; USTA comments at 37-39.

<sup>1256</sup> USTA comments at 37-39.

<sup>1257</sup> MCI comments at 17; EDLINC reply comments at 9.

<sup>1258</sup> BANX reply comments at 22-23 (stating that section 254(h)(1)(B) requires that carriers be reimbursed for discounts from "amounts charged for similar services to other parties"); SBC reply comments at 21 (stating that "[t]he literal and unambiguous language of [s]ection 254(h)(1)(B) mandates that the discounts from the carrier's otherwise applicable charges are to be reimbursed from the universal service fund"). *See also* PacTel reply comments at 26-27 (stating that "[t]he 'amounts charged' language of the Act reflects Congress' intent for pre-discount prices to be based on *actual market prices* rather than theoretical pricing constructs").

<sup>1259</sup> PacTel comments at 50.

<sup>1260</sup> PacTel comments at 50.

<sup>1261</sup> *See, e.g.*, SBC comments at 41-42; U S WEST comments at 48; WinStar comments at 12.

would be extremely difficult.<sup>1262</sup> WinStar asserts that the lowest corresponding price is unnecessary because competition in the bidding process will ensure that the prices offered to schools and libraries are the lowest available.<sup>1263</sup> WinStar also maintains that, at the very least, the Commission should not require non-dominant carriers to certify that the price offered is the lowest corresponding price. WinStar maintains that such a ruling would be consistent with the Commission's decision to eliminate tariff filing requirements for non-dominant carriers, which was based in part on the conclusion that non-dominant carriers could not control the market price or set prices at exorbitant levels.<sup>1264</sup> SBC contends that the entire lowest corresponding price concept violates the Act because the language of 254(h)(1)(B) "plainly means that the price a carrier would otherwise charge the school or library is the pre-discount price."<sup>1265</sup> SBC asserts that implementation of the lowest corresponding price would "artificially lower the reimbursement level" and "appears to mandate an unfunded discount."<sup>1266</sup>

313. Finally, Citizens Utilities addresses concerns regarding the special circumstances under which a particular subset of schools and libraries is currently receiving below-cost rates that were established through negotiated resolution of a state commission's earnings investigation.<sup>1267</sup> Citizens Utilities maintains that such rates should apply only to the schools or libraries that are part of such a regulatory bargain, and should not apply to any other school or library. That is, such a below-cost price should not be used to establish the pre-discount price for all schools and libraries within a carrier's service area.<sup>1268</sup>

## **b. Discounts**

314. Numerous commenters support the Joint Board's recommendation that schools and libraries receive discounts ranging from 20 percent to 90 percent.<sup>1269</sup> EDLINC, for example,

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<sup>1262</sup> U S WEST comments at 48. *See also* SBC reply comments at 21 (stating that the lowest corresponding price concept "may be unworkable" and "should be rejected as administratively impracticable").

<sup>1263</sup> WinStar comments at 4, 11.

<sup>1264</sup> WinStar comments at 12.

<sup>1265</sup> SBC comments at 41.

<sup>1266</sup> SBC comments at 41.

<sup>1267</sup> Citizens Utilities comments at 17-18.

<sup>1268</sup> Citizens Utilities comments at 17-18. *See also* PacTel reply comments at 27 (stating that the lowest corresponding price should not be based on short-term promotional rates because of the risk that a carrier will have to offer "in perpetuity a special promotional rate, or the rate the carrier charges other schools and libraries, even if the carrier's costs increase").

<sup>1269</sup> *See, e.g.*, ALA comments at 2; Alliance for Community Media comments at 10; EDLINC comments at 3; Illinois State Library comments at 1; Mississippi comments at 5; Owen J. Roberts School District comments at 1;

states that "the wide range of the proposed discounts is essential if final discounted rates are to be affordable for all schools and libraries."<sup>1270</sup> Illinois State Library asserts that the 20 percent to 90 percent discounts "will be instrumental in assisting libraries in meeting the information needs of their community of users."<sup>1271</sup> USTA notes that the discount matrix recommended by the Joint Board should be easy to administer.<sup>1272</sup>

315. Other commenters oppose the Joint Board's recommended discount structure.<sup>1273</sup> ALTS, for example, expresses the concern that there does not seem to be any concrete evidence that 20 percent to 90 percent discounts are necessary for schools and libraries, and warns that analysis outlining why those particular discount rates were chosen must be completed before discounts are permitted.<sup>1274</sup> LCI states that the proposed discounts are "excessive" and that no discount above 20 percent should be permitted.<sup>1275</sup>

316. Discounts in High Cost Areas. Most commenters support giving a greater discount to schools and libraries located in high cost areas.<sup>1276</sup> ALA states, for example, that "[a]dditional discounts for high cost areas are not only appropriate, they are clearly called for in the law."<sup>1277</sup> Illinois State Library asserts that high cost of services is as important a

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PacTel comments at 51-52; Teleport comments at 9; Urban League comments at 3-4; Universal Service Alliance comments at 9; USTA comments at 36; Washington Library comments at 2; Atlanta Board of Education reply comments at 1; Fort Frye School District reply comments at 1.

<sup>1270</sup> EDLINC comments at 3.

<sup>1271</sup> Illinois State Library comments at 1.

<sup>1272</sup> USTA comments at 36.

<sup>1273</sup> *See, e.g.*, ALTS comments at 18; LCI comments at 11.

<sup>1274</sup> ALTS comments at 18.

<sup>1275</sup> LCI comments at 11. *See also* AirTouch reply comments at 30-31 (supporting LCI's position because "[i]t is a sound way to ensure that the broadest number of schools and libraries benefit, and thus the largest number of children benefit, from this support program").

<sup>1276</sup> *See, e.g.*, ALA comments at 5-6; Alliance for Distance Education comments at 2; Ameritech comments at 21; Brooklyn Public Library comments at 4-6; BellSouth comments at 37; CEDR comments at 2, 10; Colorado LEHTC comments at 2; EDLINC comments at 15-16; Governor of Guam comments at 11-12; Great City Schools comments at 4-5; Illinois Board of Education comments at 2; Illinois State Library comments at 1-2; ITC comments at 8; New York DOE comments at 4; PacTel comments at 51; RTC comments at 38; SBC comments at 9; Teleport comments at 9; USTA comments at 37; Washington Library comments at 5-7; Washington UTC comments at 6; West Virginia Consumer Advocate comments at 7-19; WorldCom comments at 30; Wyoming PSC comments at 10-11.

<sup>1277</sup> ALA comments at 5.

consideration as level of economic disadvantage in making services affordable to libraries.<sup>1278</sup> United States Senator Charles S. Robb states that "[t]he Joint Board recognizes in its recommendations and the FCC should continue to recognize in the final rules that affordability includes not only the ability for a school to pay for services, but the total cost of obtaining services in that school's area."<sup>1279</sup>

317. Some commenters suggest modifications to the discount structure recommended by the Joint Board.<sup>1280</sup> ALA, EDLINC, and NTIA, for example, contend that the discount matrix contained in the Recommended Decision fails adequately to address the needs of libraries in high cost areas. These commenters note that, for economically disadvantaged schools and libraries, there is no greater discount for those located in high cost areas than for those in low cost areas, and even in the less disadvantaged categories where there is a greater percentage discount for those in high costs areas, that additional percentage discount is not adequate to address the true cost differential.<sup>1281</sup> ALA and NTIA assert, therefore, that the discount matrix should be adjusted to reflect a discount for schools and libraries located in high cost areas greater than the Joint Board recommended.<sup>1282</sup> NTIA recommends that the most economically disadvantaged schools receive steeper discounts based on their location in a high cost area. That is, NTIA suggests that schools with 50 percent to 74 percent of their students eligible for the national school lunch program receive discounts ranging from 75 percent if located in a low cost area, to 80 percent if located in a mid-cost area, to 85 percent if located in a high cost area. NTIA also recommends that schools with 75 percent to 100 percent of their students eligible for the national school lunch program receive discounts ranging from 85 percent if located in a low cost area, to 90 percent if located in a mid-cost area, to 95 percent if located in a high cost area.<sup>1283</sup>

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<sup>1278</sup> Illinois State Library comments at 1. *See also* RTC comments at 41 (stating that including a high cost variable in the discount matrix is necessary to ensure that the affordability requirement of the 1996 Act is met).

<sup>1279</sup> Charles S. Robb reply comments at 2.

<sup>1280</sup> *See, e.g.,* ALA comments at 7; CNMI comments at 15-17; Cox comments at 13-14; Mississippi comments at 5.

<sup>1281</sup> ALA comments at 7; EDLINC comments at 16; NTIA reply comments at 24-25. EDLINC provides the following example of the cost differential between high cost and low cost schools:

For example, schools in Vancouver, Washington, pay about \$125.00 per month for a T-1 line, while schools in rural White Salmon, Washington, pay \$2,100.00 per month for the same service -- a difference of over 1600 percent.

EDLINC comments at 16 (*citing* a survey conducted by the American Association of School Administrators, August 1996). *See also* Washington Library comments at 5-6 (expressing concerns about the lack of additional high cost support for the most economically disadvantaged schools and libraries and stating its belief that "the discount scale should provide more support for the combination of high cost/high economic need").

<sup>1282</sup> ALA comments at 7.

<sup>1283</sup> NTIA reply comments at 24-25. *See also* West Virginia Consumer Advocate comments at 7-10 (asserting that the Commission should amend the proposed discount matrix to provide an 85 percent discount for high cost

318. EDLINC maintains that areas in which there is no competition should be treated as high cost areas because "[i]f there is no competition in an area, even the price offered to similarly-situated customers is likely to reflect the lack of competition and therefore result in a higher discount price than would be available to schools and libraries in areas where there is competition."<sup>1284</sup> CNMI asserts that the discount matrix should be modified to reflect per-capita income levels. As support for that premise, CNMI states that, although just under 70 percent of children in the Commonwealth are eligible for the national school lunch program and its schools, therefore, would not qualify for the greatest discount under the Joint Board proposal, the Northern Mariana Islands have among the lowest telephone subscribership rates and some of the highest telecommunications rates in the nation.<sup>1285</sup>

319. Discounts for Economically Disadvantaged Schools and Libraries. Several commenters support the Joint Board's decision not to grant 100 percent discounts to schools and libraries.<sup>1286</sup> Ameritech maintains that requiring schools and libraries to contribute toward the cost of covered services will encourage them to solicit the best pre-discount price and will discourage wasteful purchases.<sup>1287</sup> BellSouth states that requiring schools and libraries to share in the expense of services will prompt them to "seek the best pre-discount price and to make informed, knowledgeable choices among their options, thereby building in effective fiscal constraints on the discount fund."<sup>1288</sup> Other commenters, however, contend that even the highest discounts recommended by the Joint Board will not render supported services affordable to the most economically disadvantaged schools and libraries.<sup>1289</sup> Washington SPI recommends that such schools and libraries be eligible for a Lifeline program similar to the program currently in place for eligible low-income consumers.<sup>1290</sup>

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schools and libraries with between 50 and 74 percent of their students eligible for the national school lunch program, and a 95 percent discount for high cost schools with over 75 percent of their students eligible for the national school lunch program.)

<sup>1284</sup> EDLINC comments at 9.

<sup>1285</sup> CNMI comments at 15-16. *See also* Mississippi comments at 5 (suggesting that discounts should be based on data such as per capita income and households below the poverty line reflecting the entire economic condition of an area rather than just its schools).

<sup>1286</sup> *See, e.g.,* Ameritech comments at 20; BellSouth comments at 34; Washington UTC comments at 6.

<sup>1287</sup> Ameritech comments at 20.

<sup>1288</sup> BellSouth comments at 34.

<sup>1289</sup> *See, e.g.,* Alliance for Community Media comments at 11; CEDR comments at 16; Washington SPI comments at 1.

<sup>1290</sup> Washington SPI comments at 1. *See also* CEDR comments at 16 (recommending that in districts where even the maximum level of discount does not make services affordable, "the option should exist to appeal to the state regulatory commission for an additional lifeline discount").

320. ALA asserts that the Joint Board's proposed discount matrix does not adequately address the needs of libraries, because ALA contends that poverty data, rather than school lunch eligibility data, should be used to determine libraries' levels of economic disadvantage. ALA, therefore, submits an alternate discount matrix that uses the percentage of residents living in poverty within a one mile radius of a library outlet to determine a library's level of economic disadvantage.<sup>1291</sup> The matrix is based on a sample of 500 library outlets and uses 1990 U.S. Census poverty data.<sup>1292</sup> The percentage breakdowns proposed by ALA are based on the percentage breakdowns in the Joint Board's recommended discount matrix. For example, 16 percent of schools have between 50 and 74 percent of their students eligible for the national school lunch program. The Joint Board proposed giving such schools an 80 percent discount on supported services. ALA states that 16 percent of libraries have between 16 and 22 percent of the patrons within a one mile radius living at or below the poverty line. ALA recommends that such libraries also be eligible for an 80 percent discount on supported services. According to ALA, an area in which over 22 percent of the population is at or below the poverty line is considered extremely impoverished.<sup>1293</sup>

### **c. Identifying High Price Areas**

321. Some commenters support the Joint Board's recommendation to use unseparated loop costs to determine the high cost discount for schools and libraries.<sup>1294</sup> ALA, for example, states that unseparated loop costs "may well be a convenient and useful method of estimating eligibility."<sup>1295</sup> Alliance for Distance Education contends that the Commission should use unseparated loop costs until review of the program in 2001.<sup>1296</sup> West Virginia Consumer Advocate asserts that the Commission should use unseparated loop costs to develop a definition of low, high, and mid-cost schools and libraries.<sup>1297</sup>

322. Other commenters support using the same mechanism to determine high cost for

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<sup>1291</sup> Letter from Carol C. Henderson, ALA, to Mark Nadel, Common Carrier Bureau, dated March 17, 1997 at Att. 2 (ALA March 17 *ex parte*)

<sup>1292</sup> ALA March 17 *ex parte* at Att. 2.

<sup>1293</sup> Letter from J. Andrew Magpantay, ALA, to Irene M. Flannery, Common Carrier Bureau, dated April 4, 1997 (ALA April 4 *ex parte*).

<sup>1294</sup> See, e.g., ALA comments at 5-6; Alliance for Distance Education comments at 2; New York DOE comments at 4; West Virginia Consumer Advocate comments at 7-10. *But see* RTC comments at 41-42 (supporting use of total unseparated loop costs because schools and libraries have different requirements and a different geographical relationship to central office locations than individual subscribers).

<sup>1295</sup> ALA comments at 6.

<sup>1296</sup> Alliance for Distance Education comments at 2.

<sup>1297</sup> West Virginia Consumer Advocate comments at 7-10.

schools and libraries as that used to determine high cost support for "core" services.<sup>1298</sup> SBC asserts that using the same mechanism will be less administratively burdensome than implementing and maintaining different mechanisms.<sup>1299</sup> USTA contends that because the Commission is currently working to develop a proxy model for the high cost portion of core services funding, there is no need to develop a separate model for schools and libraries.<sup>1300</sup> ITC recommends using the same mechanism to determine high cost for "core" services and schools and libraries, but also recommends eliminating from the final discount matrix the mid-cost category contained in the Recommended Decision matrix.<sup>1301</sup> EDLINC states that using the same high cost methodology for core services and for schools and libraries generally appears to be reasonable, with one exception. In some areas with developed core networks but with relatively low demand for the more advanced services to which schools and libraries may subscribe, EDLINC contends that there may not be a correlation between the cost of providing core services and the cost of providing advanced services.<sup>1302</sup>

323. Some commenters provide alternative methods for calculating the high cost discount for schools and libraries.<sup>1303</sup> Colorado LEHTC recommends that the Commission "consider all rural areas, as defined by the Department of Health and Human Services' Office of Rural Health Policy including the Goldsmith Modification, to be high cost areas for the purposes of the discount matrix."<sup>1304</sup> Governor of Guam maintains that the Commission should provide for additional mechanisms, over and above the discount matrix, so that schools and libraries for which the lowest bid for services is over 115 percent of the national average, for example, should be eligible to receive discounts in addition to those contemplated in the discount matrix.<sup>1305</sup> PacTel contends that all schools and libraries participating in the discount program should submit to the administrator a written statement of the retail price of a T-1 connection from the school or library to the point of presence of the nearest service provider. The administrator should be directed to sort the data and calculate dividing lines to distinguish

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<sup>1298</sup> See, e.g., BellSouth comments at 37; ITC comments at 8; NCTA comments at 19; SBC comments at 9; Teleport comments at 9; USTA comments at 37; WorldCom comments at 30; Wyoming PSC comments at 10-11.

<sup>1299</sup> SBC comments at 9.

<sup>1300</sup> USTA comments at 37.

<sup>1301</sup> ITC comments at 8.

<sup>1302</sup> EDLINC reply comments at 16-17.

<sup>1303</sup> See, e.g., Brooklyn Public Library comments at 4-6; Colorado LEHTC comments at 2; Governor of Guam comments at 11-12; Illinois State Library comments at 1-2; New York DOE comments at 4; PacTel comments at 51; RTC comments at 41-42; West Virginia Consumer Advocate comments at 7-10.

<sup>1304</sup> Colorado LEHTC comments at 1-2 (stating that "distance and isolation combine to create unaffordable rates").

<sup>1305</sup> Governor of Guam comments at 11-12.

between higher and lower cost categories to conform to the allocation percentages in the Joint Board's proposed discount matrix.<sup>1306</sup> EDLINC, however, maintains that service providers, rather than schools and libraries, should be required to submit pricing information because the providers are much more familiar with their pricing structures.<sup>1307</sup> Illinois State Library asserts that high cost for schools and libraries should be calculated using a population density factor.<sup>1308</sup> New York DOE suggests that availability of advanced services should be considered in determining high cost for schools and libraries.<sup>1309</sup> AFT states that the definition of high cost should consider factors that lead schools in densely populated, low-income areas to pay high telecommunications costs. According to AFT, these factors include the cost of providing the complex technologies required by students with disabilities and the higher costs associated with protecting and maintaining educational facilities and equipment.<sup>1310</sup>

324. Finally, Brooklyn Public Library asserts that the Joint Board's recommendations did not adequately consider high cost factors and to correct the flaw it perceives, proposes an alternative, two-part formula for determining the high cost discount. Brooklyn Public Library recommends calculating local baseline rates for all services. In areas in which certain advanced services, such as frame relay, are not available and the subscriber pays a "premium" rate for those advanced services, that "premium" rate should be discounted to the local baseline rate. This discounted rate would be known as the adjusted baseline rate. Brooklyn Public Library then recommends that the adjusted baseline rate be compared against a national average of local baseline rates to calculate an additional discount. These two discounts would comprise the high cost discount.<sup>1311</sup>

#### **d. Identifying Economically Disadvantaged Schools and Libraries**

325. Schools. Many commenters support using eligibility for the national school lunch program to determine a school's level of economic disadvantage.<sup>1312</sup> Great City Schools, for

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<sup>1306</sup> PacTel comments at 51.

<sup>1307</sup> EDLINC reply comments at 15.

<sup>1308</sup> Illinois State Library comments at 1-2.

<sup>1309</sup> New York DOE comments at 4.

<sup>1310</sup> AFT reply comments at 2-3.

<sup>1311</sup> Brooklyn Public Library comments at 4-6.

<sup>1312</sup> *See, e.g.,* AFT comments at 3; Alliance for Distance Education comments at 2; Great City Schools comments at 3-4; Kansas CC comments at 4-5; NCTA comments at 20; New York DOE comments at 4; Ohio DOE comments at 6; USTA comments at 36-37; Washington UTC comments at 6-7. Children from families whose incomes are 130 percent or less of the poverty level qualify for a free lunch, while children from families whose incomes are between 130 percent and 185 percent of the poverty level qualify for a reduced price lunch. *See* 47 U.S.C. § 1758(b).



example, states that use of the national school lunch program "is workable, it is nationally understandable, it is uniform, and it is as fair or fairer on the whole as [any] other measure of poverty."<sup>1313</sup> AFT notes that since eligibility for the national school lunch program is based on family income, it is "generally regarded as a good indicator of schools' and districts' ability to afford educational services."<sup>1314</sup> Washington UTC contends that using eligibility for the national school lunch program "is likely to result in a more accurate determination of the school's need level than a measure which examines general community income."<sup>1315</sup> Washington UTC further asserts that using a measure of economic disadvantage that is external to the school itself, such as average area income, is not as likely to reflect the level of poverty within schools or school districts.<sup>1316</sup> USTA maintains that "[u]sing an existing and readily available metric has the advantage of being both simple and relatively inexpensive to administer."<sup>1317</sup>

326. Some commenters address the use of eligibility for the national school lunch program to determine discounts for non-public schools.<sup>1318</sup> Great City Schools supports using eligibility for the national school lunch program and "disputes any contention that the free or reduced price lunch index and child count is not a viable measure of poverty for private and parochial schools."<sup>1319</sup> Great City Schools also contends that the burden imposed on non-public schools is not great because school-wide counts of low-income children are used to determine eligibility for other federal programs, such as Title I of the Improving America's Schools Act of 1994.<sup>1320</sup> Further, Great City Schools maintains that alternate methods of determining the actual number of low-income children that involve a mathematical equating of one measure of poverty

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<sup>1313</sup> Great City Schools comments at 3. *Cf.* Time Warner comments at 33 (stating that "[a]lthough adoption of the national school lunch program standard for differentiating among wealthy and disadvantaged schools will help, the Commission should continue to evaluate and refine other approaches to minimize the drain on the limited resources available to support universal service").

<sup>1314</sup> AFT comments at 3.

<sup>1315</sup> Washington UTC comments at 7.

<sup>1316</sup> Washington UTC comments at 7.

<sup>1317</sup> USTA comments at 36 (noting also that "the Commission should seek guidance from the education community and others more familiar with these issues before making a final decision"). *See also* AFT comments at 3 ("[u]sing school lunch criteria minimizes administrative burden").

<sup>1318</sup> AFT comments at 3-4; Great City Schools comments at 2-4.

<sup>1319</sup> Great City Schools comments at 2. *See also* Washington UTC comments at 7 (supporting use of eligibility for the national school lunch program for non-public schools, stating that "[u]se of the same measure for both public and non-public schools will result in a more equitable determination of support and in ease of administration").

<sup>1320</sup> Great City Schools comments at 3. *See also* New York DOE comments at 4 (stating that New York already requires information on the number of students eligible for the school lunch program from non-public schools).

with another are currently permitted by regulation.<sup>1321</sup> For example, Great City Schools states that non-public schools may match children's home addresses with the home addresses of individuals on the Aid to Families with Dependent Children (AFDC) rolls, or they may conduct a survey of the income levels of their students' families to determine eligibility for the school lunch program.<sup>1322</sup> Great City Schools emphasizes that non-public schools must be required to use actual counts of low-income children and should not be permitted to approximate the percentage of low-income children using the zip codes of individual children's residences or the poverty level of the surrounding public school district. According to Great City Schools, allowing the use of those latter methods may overcount eligible students.<sup>1323</sup> EDLINC suggests, however, that if it draws at least 60 percent of its students from the surrounding public school district, a non-public school should be permitted to use the same discount as the school district.<sup>1324</sup> Great City Schools responds that EDLINC's proposal "inherently overstates virtually every private school's low income rate and allows such private schools to qualify and receive an unjustifiably high discount from the universal service fund."<sup>1325</sup>

327. AFT also supports the use of federally approved proxy methods to determine a school lunch count for schools that do not participate in the national school lunch program.<sup>1326</sup> In addition, AFT supports the use of those same proxy methods for schools that do participate in the school lunch program, but in which students undersubscribe to the program, producing an inaccurate count of eligible students. AFT states that such schools include "some high schools, rural schools, [and] urban schools with highly transient populations."<sup>1327</sup> Advantages of using federally approved proxy methods, according to AFT, include the fact that they are contained in an existing statute and are the product of a negotiated rulemaking proceeding in which schools

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<sup>1321</sup> Great City Schools comments at 3. Great City Schools cites 34 C.F.R. § 200.28(a)(2)(i)(B), which is part of Title I of the Improving America's Schools Act of 1994. Under this regulation, private schools that do not have access to the same poverty data that public schools use to count children from low-income families may use comparable data "(1) [c]ollected through alternative means such as a survey" or "(2) [f]rom existing sources such as AFDC or tuition scholarship programs." 34 C.F.R. § 200.28(a)(2)(i)(B)(1) and (2).

<sup>1322</sup> Great City Schools comments at 3.

<sup>1323</sup> Great City Schools comments at 4 (stating that "private school exclusionary criteria and costs . . . should disqualify such an entity from using the entire zone or area's overall poverty rate as an alternative to an actual count of low-income children"). *But see* EDLINC comments at 13 (stating that "another simple proxy could include an examination of family income by census data, by either county school district, library service area, or zip code to identify a count that mirrors schools lunch data").

<sup>1324</sup> EDLINC comments at 14.

<sup>1325</sup> Great City Schools reply comments at 4.

<sup>1326</sup> AFT comments at 3.

<sup>1327</sup> AFT comments at 3. *See also* EDLINC comments at 12 (stating that "high school students have been historically undercounted and there may also be undercounting of transient populations").

participated, as well as the fact that schools already use the models.<sup>1328</sup> EDLINC suggests that, to address the high school undercounting problem, public schools be permitted to determine high school free or reduced price lunch eligibility by using elementary school data, such as sibling count or "feeder pattern" counts.<sup>1329</sup> AFT advises, however, that "expanding the use of proxies beyond those that have already been adopted could unnecessarily entangle the FCC in endless review and approval processes of many, less appropriate proxy schemes."<sup>1330</sup>

328. Some commenters suggest alternative approaches to determining a school's level of economic disadvantage.<sup>1331</sup> GTE, for example, asserts that the universal service administrator use Census Bureau data to determine the underlying economic wealth of the geographic area served by a school.<sup>1332</sup> GTE states that "[t]his source has the advantage of being readily available from an expert government agency, and requires only minimal, one-time activity by the school . . . -- identification of the geographic areas used by the Census Bureau that are included within the school's serving area, based upon information provided by the fund administrator."<sup>1333</sup> CEDR suggests using a formula that takes into account value of owner-occupied housing or median household income, and population density, to determine the applicable discount for each school district in the country.<sup>1334</sup> The discount rate would then be applied to a "median national benchmark price for each telecommunications service existing in a competitive environment."<sup>1335</sup>

329. Libraries. While some commenters agree with the Joint Board's recommendation that eligibility for the national school lunch program may provide an accurate measure of a library's level of economic disadvantage,<sup>1336</sup> many commenters representing the library

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<sup>1328</sup> AFT comments at 4.

<sup>1329</sup> EDLINC comments at 13.

<sup>1330</sup> AFT comments at 4. *See also* AFT reply comments at 2 (noting that the Food Research and Action Council has developed software, available at a cost of less than \$5000.00, that allows states and localities to calculate the poverty count that is the basis for national school lunch eligibility).

<sup>1331</sup> *See, e.g.*, CEDR comments at 11-17; GTE comments at 106-107.

<sup>1332</sup> GTE comments at 106.

<sup>1333</sup> GTE comments at 106-107.

<sup>1334</sup> CEDR comments at 15.

<sup>1335</sup> CEDR comments at 14.

<sup>1336</sup> *See, e.g.*, Alliance for Distance Education comments at 2; NCTA comments at 20; New York Public Library comments at 2.

community disagree with that premise.<sup>1337</sup> ALA, for example, noting that the Act does not require that the same measure be used for schools and libraries, states that libraries may not have ready access to information that would allow them to coordinate their service areas with the applicable school district lunch data. ALA also notes that library service areas and school districts often are not identical, and further notes that whether that is the case varies greatly from state to state.<sup>1338</sup> ALA and Brooklyn Public Library note that many libraries already use poverty level data for other purposes.<sup>1339</sup> ALA suggests, therefore, using the poverty rate, based on U.S.Census Bureau data, of those in a library's service area to determine libraries' levels of economic disadvantage.<sup>1340</sup> Specifically, ALA proposes requiring libraries to determine their levels of economic disadvantage by measuring the percentage of residents at or below the poverty line within either a one mile radius<sup>1341</sup> or a two-mile radius<sup>1342</sup> of a public library branch or facility.

330. According to Colorado Department of Education, using a one-mile radius has several advantages: "a) precise service area boundaries do not exist for every public library outlet in the U.S.; b) in the absence of such boundaries and in the interest of fairness, some

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<sup>1337</sup> See, e.g., ALA comments at 3-5; Brooklyn Public Library comments at 8; Colorado LEHTC comments at 2; Great City Schools comments at 4; Illinois State Library comments at 1; New York DOE comments at 4-5; NCLIS comments at 9-10; North Dakota State Library comments at 1; Pennsylvania Library Ass'n comments at 1; Seattle comments at 3; Washington Library comments at 3-5; Washington UTC comments at 8.

<sup>1338</sup> ALA comments at 4. See also Colorado LEHTC comments at 2 (noting that use of the national school lunch program "will be difficult for libraries to implement due to overlapping jurisdictions"); NCLIS comments at 10 (stating that "[w]hile the national school lunch program reflects the level of economic disadvantage for children enrolled in school as students, there appears to be little evidence that such a community wealth measurement model can be applied to those larger community segments that are served by public libraries"); Washington Library comments at 3 (noting that "many libraries of the state cover wide geographic areas which include several school districts within each library service area and that there is no clear correlation of a school district to a library service outlet").

<sup>1339</sup> See ALA comments at 5; Brooklyn Public Library comments at 8.

<sup>1340</sup> ALA reply comments at 3-4. See also Brooklyn Public Library comments at 8 (supporting use of poverty data); New York DOE comments at 5 (same); North Dakota State Library comments at 1 (same). Cf. Great City Schools comments at 4 (stating that "[p]ublic libraries serve all residents of a jurisdictional area without exclusionary criteria or fees, and therefore might legitimately use the entire jurisdiction's composite poverty rate or combined school zone poverty rates").

<sup>1341</sup> See ALA reply comments at 5; ALA March 17 *ex parte* at Att. 2. See also Letter from Andrew Magpantay, ALA, to Mark Nadel, Common Carrier Bureau, dated April 25, 1997 at 2 (ALA April 25 *ex parte*) (citing E. Susan Palmer, *The Effect of Distance on Public Library Use: A Literature Survey*, LIBRARY RESEARCH, Winter 1981, at 317, for the 1911 and 1943 historical precedent cited for use of a one-mile radius); Letter from Nancy Bolt, Colorado Department of Education, to Mark Nadel, Common Carrier Bureau, dated March 27, 1997 at 2 (Colorado Department of Education March 27 *ex parte*).

<sup>1342</sup> Letter from Andrew Magpantay, ALA, to Irene Flannery, Common Carrier Bureau, dated May 1, 1997 at 2-3 (ALA May 1 *ex parte*).

standard geographic boundary must be selected; and c) because studies of public library use have found consistently that residential proximity to a public library outlet is a major predictor of its use."<sup>1343</sup> Colorado Department of Education also asserts that calculating poverty data for that one-mile radius is possible using geographic information systems (GIS) software.<sup>1344</sup> According to ALA, Florida State University, which performed the analysis underlying the libraries matrix submitted by ALA, will calculate the one-mile radius poverty data for all public library outlets in the United States, and ALA will ensure that the information is readily available to all public libraries.<sup>1345</sup>

331. Colorado Department of Education recommends that, to be consistent with eligibility standards under the national school lunch program, the poverty-based discount for libraries should be based on 185 percent of the poverty level.<sup>1346</sup> ALA notes, however, that applying the distribution of universal service discounts contained in the Joint Board's proposed discount matrix to a libraries discount matrix "should obviate the need for recalculating residential poverty data to set up library universal service discount distributions based on residents within 185% of the poverty level."<sup>1347</sup>

332. Some commenters provide additional alternatives to use of the national school lunch program to determine libraries' levels of economic disadvantage.<sup>1348</sup> Colorado LEHTC "recommend[s] using the same income threshold as the [national school lunch program], but broadening the scope to all households in a library service area, not a school district."<sup>1349</sup> Seattle suggests aggregating the discounts of the three public schools closest to a library, and also suggests considering any unusual population characteristics, such as a large senior citizen population, when calculating a library's level of economic disadvantage.<sup>1350</sup> Pennsylvania Library Ass'n recommends using statistics that "determine the per capita market value in each

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<sup>1343</sup> Letter from Nancy Bolt, Colorado Department of Education, to Mark Nadel, Common Carrier Bureau, dated March 28, 1997 at 2 (Colorado Department of Education March 28 *ex parte*).

<sup>1344</sup> Colorado Department of Education March 28 *ex parte* at 2.

<sup>1345</sup> ALA April 4 *ex parte* at 2-3.

<sup>1346</sup> Colorado Department of Education March 28 *ex parte* at 2.

<sup>1347</sup> ALA April 4 *ex parte* at 2.

<sup>1348</sup> See, e.g., Colorado LEHTC comments at 2; Pennsylvania Library Ass'n comments at 1; Seattle comments at 3.

<sup>1349</sup> Colorado LEHTC comments at 2 .

<sup>1350</sup> Seattle comments at 3.

community" to determine libraries' level of economic disadvantage.<sup>1351</sup>

333. Some commenters support allowing library systems to compute discounts on an individual branch basis or to compute an average discount.<sup>1352</sup> ALA, for example, states that a library system may have a branch in an extremely impoverished area, but the rest of the system's service area may be relatively wealthy. The system's overall poverty rate may not, therefore, adequately reflect conditions for the impoverished branch. "In such a case, ALA recommends that library systems be allowed to report each branch service area separately and allocate the discounts accordingly."<sup>1353</sup> Washington State Library notes that such an approach would be consistent with the Joint Board's recommendation regarding computation of discounts by school districts.<sup>1354</sup>

334. Additional Considerations. EDLINC suggests that the Commission establish a "hardship appeals process," through which a school or library could apply for a greater discount. This process would be limited to schools and libraries in great need and that did not, in their own estimation, receive an adequate discount. Under EDLINC's proposal, the maximum discount would remain at 90 percent.<sup>1355</sup> AFT, on the other hand, asserts that establishing a hardship appeals process at this time would raise numerous problems, including additional administrative burden and possible circumvention of the discount mechanism.<sup>1356</sup> AFT suggests that the Commission defer any decision to establish a hardship appeals process until after the discount mechanism has been implemented and a "national evaluation" has been completed.<sup>1357</sup>

335. Some commenters oppose the Joint Board's recommendation that the Commission -- rather than the states -- dictate a schedule for providing different levels of discounts to schools and libraries based on economic disadvantage.<sup>1358</sup> Cincinnati Bell, for example, contends that decisions regarding the level of discounts and how they are calculated should be left to the states.

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<sup>1351</sup> Pennsylvania Library Ass'n comments at 1. *See also* Mississippi comments at 5 (supporting the use of per-capita income to determine libraries' level of economic disadvantage).

<sup>1352</sup> *See, e.g.,* ALA comments at 9; Brooklyn Public Library comments at 8; Washington Library comments at 5.

<sup>1353</sup> ALA comments at 9.

<sup>1354</sup> Washington Library comments at 4-5 (*citing* Recommended Decision, 12 FCC Rcd at 375).

<sup>1355</sup> EDLINC comments at 15.

<sup>1356</sup> AFT comments at 4-5. *See also* Great City Schools reply comments at 5 (stating that "a hardship appeal option will generate thousands of requests for special consideration based on factors other than [sic] actual low-income counts or high cost status as allowed in the Act").

<sup>1357</sup> AFT comments at 5.

<sup>1358</sup> *See, e.g.,* Cincinnati Bell comments at 16; CSE comments at 12; Delaware PSC comments at 1-2, 4-6.

"A federal program that mandates specific discounts down to the individual school level cannot possibly lead to an efficient distribution of funds because of the vast differences between schools and education funding programs across the nation."<sup>1359</sup> CSE maintains that universal service support should be available only to the schools and libraries in greatest need, and should not be available for "schools serving the wealthy."<sup>1360</sup> Delaware PSC is concerned that it will become a "net loser" under the recommended schools and libraries discount structure because it is likely to contribute more money than it will receive.<sup>1361</sup>

336. Finally, some commenters address additional issues related to the issue of how the Commission should determine a school's or library's level of economic disadvantage.<sup>1362</sup> Ameritech, for example, asserts that the universal service administrator should calculate the discounts for all eligible schools and libraries and post the information on the same website on which the RFPs are published.<sup>1363</sup> Ohio DOE urges the Commission to ensure that the schools and libraries discount program does not widen the existing disparity between economically disadvantaged schools and their more affluent counterparts. Ohio DOE recommends, therefore, that a "trust fund or other similar mechanism" be established to set aside funding for economically disadvantaged schools and to give such schools additional time to acquire the technical assistance necessary to implement a program eligible for universal service support.<sup>1364</sup>

#### **e. Cap and Trigger**

##### **(1) Cap Level**

337. Numerous commenters address the \$2.25 billion annual cap on schools and libraries universal service support recommended by the Joint Board.<sup>1365</sup> Washington UTC, for example, "supports the Joint Board adoption of an annual cap on schools and library support, set

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<sup>1359</sup> Cincinnati Bell comments at 16.

<sup>1360</sup> CSE comments at 12.

<sup>1361</sup> Delaware PSC comments at 1-2, 4-6.

<sup>1362</sup> *See, e.g.*, Ameritech comments at 21; Ohio DOE comments at 6.

<sup>1363</sup> Ameritech comments at 21.

<sup>1364</sup> Ohio DOE comments at 6.

<sup>1365</sup> *See, e.g.*, Ad Hoc comments at 31-32; AT&T comments at 21; Bell Atlantic comments at 21; Citizens Utilities comments at 17; CSE comments at 11-12; MCI comments at 17-18; NYNEX comments at 39-40; TCA comments at 8; Washington UTC comments at 5; WorldCom comments at 27; AFT reply comments at 4; AirTouch reply comments at 30-31; ALA reply comments at 7; EDLINC reply comments at iv, 17; Great City Schools reply comments at 2.

at a fiscally prudent level,"<sup>1366</sup> while Great City Schools states that the \$2.25 billion annual cap is "reasonable and defensible."<sup>1367</sup> While generally supporting the concept of an annual cap, AT&T and several other commenters assert that the Joint Board's recommended cap is too high and should be reduced.<sup>1368</sup> Bell Atlantic and WorldCom characterize the recommended cap as "excessive,"<sup>1369</sup> while Ad Hoc contends that "the establishment of a cap does not fully address the fiscal concerns raised by the Joint Board's proposal."<sup>1370</sup> California PUC fears that the estimated cost of providing discounts to schools and libraries may be higher than the \$2.25 billion cap and doubts that the funding requirements for schools and libraries will be predictable or sustainable.<sup>1371</sup> NYNEX asserts that the \$2.25 billion figure far exceeds what will be necessary to fund the eligible services, is unwieldy, and will significantly burden both carriers and consumers.<sup>1372</sup> NYNEX recommends instead that the cap be set initially at \$1.5 billion, with a goal of achieving the McKinsey full classroom model by the year 2005, and that the cap be reevaluated in 10 years.<sup>1373</sup> NYNEX also asserts that undisbursed funds in any given year should not be carried over to the next year because such a carry-over provision "is likely to make the fund increasingly burdensome as time goes on."<sup>1374</sup> ALA, however, states that "[b]arring carryover would create artificial deadlines and incentives to make hasty commitments."<sup>1375</sup> If the cap exceeds demand and there is a substantial amount of carryover each year, ALA recognizes that universal service support mechanisms may become unmanageable. ALA suggests that the Commission revisit the size of universal service support mechanisms at the 2001 review or, as an alternative, suggests that the Commission impose a reasonable cap on either the amount of carryover permitted each year or a limit on how long carryover funds remain available for

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<sup>1366</sup> Washington UTC comments at 5.

<sup>1367</sup> Great City Schools reply comments at 2.

<sup>1368</sup> *See, e.g.*, Ad Hoc comments at 31-32; AT&T comments at 21; Bell Atlantic comments at 21; Citizens Utilities comments at 17; MCI comments at 17-18; WorldCom comments at 27.

<sup>1369</sup> Bell Atlantic comments at 21; WorldCom comments at 27. *See also* Ameritech reply comments at 4-5 (stating that size of cap is inappropriate); SBC reply comments at 19 (arguing that size of fund "will place an undue burden on consumers").

<sup>1370</sup> Ad Hoc comments at 30.

<sup>1371</sup> California PUC comments at 17-18.

<sup>1372</sup> NYNEX comments at 38.

<sup>1373</sup> NYNEX comments at 39. *See also* AirTouch reply comments at 30-31 (supporting NYNEX's position).

<sup>1374</sup> NYNEX comments at 39-40.

<sup>1375</sup> ALA reply comments at 7.



use.<sup>1376</sup>

338. Citizens Utilities also contends that the recommended cap will "become the funding floor or target figure that will be pursued by potential recipients" and will "become the dollar value of a politically untouchable environment."<sup>1377</sup> According to Citizens Utilities, lowering the cap will ensure that universal service funds are targeted to the neediest schools and libraries in high cost areas and will encourage states to fund their own schools and libraries discount programs.<sup>1378</sup> Ameritech argues that if the cap is not reduced, it should be divided into two components: one cap for telecommunications services and another cap for non-telecommunications services such as internal connections and Internet access. Ameritech states that "[t]his will guarantee that the subsidization of the usage of non-telecommunications products and services for certain schools will not unfairly deprive other schools of the ability to receive an appropriate subsidy for their use of telecommunications services."<sup>1379</sup> In addition, Ameritech recommends that the cap for non-telecommunications products and services be reduced over time because demand for internal connections "will peak initially and then decline over time."<sup>1380</sup>

339. Other commenters oppose proposals to lower the recommended \$2.25 billion annual cap and to prohibit carry-over of undisbursed funds.<sup>1381</sup> EDLINC contends that there is general agreement that the costs calculated in the McKinsey Report are accurate and that rolling over of undisbursed funds may be particularly important in the early years of the discount program because many schools may not be ready to participate at the outset.<sup>1382</sup> NTIA adds that "[t]here is no track record for any universal service support fund for schools and libraries, so claims that the funding level has been 'set too high' have no basis in fact."<sup>1383</sup> New York Public Library asserts that not only should the recommended cap not be lowered, the size of universal service support mechanisms should be increased. According to New York Public Library, "the size of the universal service fund outlined in the Joint Board proposal is too small to meet adequately the needs of schools and libraries nationwide, and it recommends that strong

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<sup>1376</sup> ALA reply comments at 7 (suggesting a cap on carryover funds of three times the annual \$2.25 billion cap or a time limit of two years).

<sup>1377</sup> Citizens Utilities comments at 16-17.

<sup>1378</sup> Citizens Utilities comments at 17.

<sup>1379</sup> Ameritech reply comments at 5.

<sup>1380</sup> Ameritech reply comments at 5.

<sup>1381</sup> *See, e.g.*, EDLINC reply comments at 17-18; NTIA reply comments at 27.

<sup>1382</sup> EDLINC reply comments at 17.

<sup>1383</sup> NTIA reply comments at 27.

consideration should be given to increasing the size of the fund."<sup>1384</sup> TCA, on the other hand, maintains that a cap is not in the best interest of schools and libraries because it is not predictable,<sup>1385</sup> while Time Warner asserts it would be premature to establish a cap without first adopting a working funding mechanism.<sup>1386</sup>

## **(2) Operation of Cap and Trigger**

340. Several commenters seek clarification regarding how disbursement of the schools and libraries fund would occur under the proposed trigger mechanism and rules of priority.<sup>1387</sup> RTC, for example, asserts that "[u]nless some method is found whereby all school and library service requests are cumulated, prioritized and allocated prior to the beginning of the year, it is apparent that a given recipient will have no practical means of determining whether the discount promised by the matrix will actually be available and hence will not be able to determine whether its telecommunications bill will be within its budget."<sup>1388</sup> Washington Library expresses its concern that, under the rules of priority that operate when the \$2 billion trigger amount is reached, libraries will be unsure whether funding will be available by the end of any given year and whether they will be guaranteed funding from one year to the next.<sup>1389</sup> Ad Hoc maintains that the recommended cap does not address important issues such as how the first \$2 billion will be rationed among eligible schools and libraries and "whether schools and libraries will have a future entitlement to the recommended discounts once the cap is exceeded."<sup>1390</sup> NTIA contends that the recommended \$2 billion trigger is set too high because the most economically disadvantaged schools and libraries represent a significant percentage of the total number of eligible schools and libraries and because they may have less access to information regarding the discount program and, consequently be less able than their more affluent counterparts to take advantage of the discounts quickly.<sup>1391</sup>

341. NTIA recommends, therefore, that the trigger be lowered from \$2 billion to \$1.5

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<sup>1384</sup> New York Public Library comments at 2. *Cf.* AFT reply comments at 4 (stating that, at the time of the universal service review, adjustments to the size of universal service support mechanisms, including increases, could be considered).

<sup>1385</sup> TCA comments at 8.

<sup>1386</sup> Time Warner reply comments at 22.

<sup>1387</sup> *See, e.g.*, Ad Hoc comments at 31-32; New York DOE comments at 2; PacTel comments at 53; RTC comments at 39-40; Seattle comments at 2; Washington Library comments at 5.

<sup>1388</sup> RTC comments at 39-40.

<sup>1389</sup> Washington Library comments at 5.

<sup>1390</sup> Ad Hoc comments at 31.

<sup>1391</sup> NTIA reply comments at 28-29.

billion in order to address more effectively the needs of the most economically disadvantaged schools and libraries.<sup>1392</sup> RTC suggests that discounts in the first year of the program should be limited to telecommunications services, with internal connections and Internet access phased in thereafter.<sup>1393</sup> PacTel asserts that a first come, first served approach should be used in the first year of the program, while top priority should be given to economically disadvantaged schools and libraries beginning in the second year. PacTel maintains that this approach will balance the needs of the most technologically advanced schools and libraries that will be ready to participate in year one against the needs of the poorest and least technologically advanced schools and libraries that may not be ready to participate the first year.<sup>1394</sup> Ad Hoc contends that first priority should be given to economically disadvantaged schools and libraries, as well as those located in high cost areas.<sup>1395</sup> New York DOE concludes that "[s]ome accommodation should be made in each subsequent year's allocation to ensure that priority is given to institutions that did not receive discounts in previous years."<sup>1396</sup> Seattle asserts that some limitation should be imposed on the scope of services to be funded when the cap is almost reached, so that the maximum number of schools and libraries can receive some funding.<sup>1397</sup> BANX proposes establishing a cap on funds flowing to each state to "mitigate concerns of states regarding equitable distribution."<sup>1398</sup>

342. Finally, AT&T recommends that the Commission establish a "per-institution cap" in addition to the overall cap on schools and libraries spending.<sup>1399</sup> AT&T maintains that a per-institution cap will ensure the equitable distribution of universal service funds. Without such a cap, AT&T contends that schools and libraries that are better organized or ready to apply for

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<sup>1392</sup> NTIA reply comments at 28-29. *See also* Great City Schools reply comments at 5 (stating that "the reservation for the most disadvantaged schools, at least in the first few years of Fund operation, [should] be expanded from the 10% Joint Board recommendation to a 25% to 35% reservation").

<sup>1393</sup> RTC comments at 40.

<sup>1394</sup> PacTel comments at 53.

<sup>1395</sup> Ad Hoc comments at 32.

<sup>1396</sup> New York DOE comments at 2.

<sup>1397</sup> Seattle comments at 2.

<sup>1398</sup> BANX reply comments at 23. *See also* Alliance for Public Technology comments at 3 (supporting establishment of a per-state cap).

<sup>1399</sup> AT&T comments at 21. *See also* BANX reply comments at 23 (stating that a per-institution cap "would help forestall a rush by schools and libraries to take advantage of the program before the overall annual cap is reached, and it would minimize the provider's need to engage in unrealistic pricing activities and staffing demand"); Georgia PSC reply comments at 27 (stating that "without a per-institution cap, the system would confer an arbitrary advantage on institutions that were better organized or those that simply acted earlier in the funding year"); WorldCom reply comments at 15 (stating that "AT&T's proposal to require a per-institution cap makes eminent sense as a means of assuring that all schools and libraries have a realistic opportunity to receive adequate funding").

support early in the year may have an "arbitrary advantage" over other eligible institutions and may rapidly deplete the fund. AT&T also recommends that the per-institution cap vary according to factors such as the number of students served or the size of the discount to which an institution is entitled and that schools and libraries be required to obtain certification of their eligibility from the universal service administrator.<sup>1400</sup>

343. Other commenters, however, oppose the imposition of a per-institution cap.<sup>1401</sup> EDLINC contends that the overall \$ 2.25 billion cap will be sufficient to control the cost of the discount program. EDLINC concedes that some schools and libraries will be better prepared to take advantage of the discounts right away and, without a per-institution cap, may appear to receive a disproportionate share of the benefits in the first couple of years. EDLINC contends, however, that "in time all schools will have the opportunity to install their networks, determine the level of service they need and obtain their fair share of discounts."<sup>1402</sup> Colorado LEHTC adds that "capping the amount each entity may utilize from the fund is arbitrary."<sup>1403</sup>

#### **f. Existing Contracts**

344. Some commenters assert that the new universal service discounts should apply to existing special rates.<sup>1404</sup> EDLINC, for example, maintains that a school or library should not be expected to abandon negotiated contract rates to obtain discounted rates based on prevailing pre-discount rates; instead, schools and libraries should be able to obtain the larger discounts that would result from basing the discounted rate on the negotiated contract rate."<sup>1405</sup> Agreeing, Minnesota Coalition states that "existing discount arrangements are in the public interest and should not be retroactively disqualified by newly established discount arrangements."<sup>1406</sup> Minnesota Coalition adds that existing discount arrangements should be presumed to be eligible

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<sup>1400</sup> AT&T comments at 21.

<sup>1401</sup> *See, e.g.*, Colorado LEHTC reply comments at 5; EDLINC reply comments at 18-19.

<sup>1402</sup> EDLINC reply comments at 18-19.

<sup>1403</sup> Colorado LEHTC reply comments at 5. *Cf.* Time Warner reply comments at 22 (opposing the imposition of a per-institution cap because "[i]t is virtually impossible to predict the requisite amount needed for schools and libraries before the fund is established").

<sup>1404</sup> *See, e.g.*, EDLINC comments at 18-19; Illinois Board of Education comments at 3-4; Minnesota Coalition comments at 30; Ameritech reply comments at 708; BANX reply comments at 20; PacTel reply comments at 2, 18, 28-29; SBC reply comments at 22.

<sup>1405</sup> EDLINC comments at 19. *See also* South Carolina comments at 6 ("restricting eligibility to new contracts for services penalizes those who have already embraced these principles and moved forward expeditiously to provide widespread Information Highway access").

<sup>1406</sup> Minnesota Coalition comments at 30.

for universal service funding because most such arrangements were established through competitive bidding or received close scrutiny by state agencies.<sup>1407</sup> PacTel asserts that schools and libraries should be permitted to retain existing contracts, regardless of whether they were obtained through a competitive bidding process. In addition to the time and expense associated with renegotiating existing contracts and opening them to competitive bidding, PacTel contends that "[t]here is no guarantee that a new bidding process would produce rates that are even as low as the ones currently in effect, particularly if the current rate is the product of a long-term agreement that has protected the schools and libraries from rate increases."<sup>1408</sup> SBC adds that the Commission lacks the authority to void or insert new terms in existing contracts.<sup>1409</sup> While supporting the competitive bidding concept, Ameritech adds that the administrative strains of reopening all existing contract arrangements to competitive bidding would be "monumental."<sup>1410</sup> Ameritech also asserts that schools and libraries ultimately will have the incentive to submit their requirements to a bid process to determine whether they can obtain a more favorable price.<sup>1411</sup> BellSouth, on the other hand, asserts that the states should determine whether state-mandated special rates remain in effect.<sup>1412</sup>

345. Small Cable suggests that the Commission establish a rebuttable presumption in favor of existing contracts between schools and libraries and their service providers, along with rules to ensure that existing contracts are efficient and reasonably priced.<sup>1413</sup> Small Cable states that schools, libraries, and service providers should be required to comply with the bona fide request requirement that descriptions of services be submitted to the universal service administrator for posting on a website. Small Cable suggests that, for a specified period of time, perhaps 60 days from the date of posting, interested parties could submit objections to the existing contract based on assertions of unreasonable prices, improper cross-subsidization, or anti-competitive conduct by the parties. According to Small Cable, the administrator would determine, subject to appeal to the Commission, whether services covered by the existing contract should be eligible for universal service support, with a presumption in favor of the existing contract's eligibility. Small Cable contends that such a process would provide a level of scrutiny for existing contracts to prevent collusive or unfair arrangements between schools,

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<sup>1407</sup> Minnesota Coalition comments at 30. *See also* BANX reply comments at 20 (stating that many existing school and library contracts "have already been subjected to a competitive bidding or best rate process").

<sup>1408</sup> PacTel reply comments at 28.

<sup>1409</sup> SBC reply comments at 22.

<sup>1410</sup> Ameritech reply comments at 7. *See also* BANX reply comments at 20 (stating that requiring schools and libraries to renegotiate existing contracts "would create chaos in the marketplace due to the number of bids that would have to be entertained simultaneously").

<sup>1411</sup> Ameritech reply comments at 8.

<sup>1412</sup> BellSouth comments at 38.

<sup>1413</sup> Small Cable reply comments at 8-10.

libraries, and their service providers.<sup>1414</sup>

346. Other commenters assert that the Commission should ensure that schools and libraries benefit from the new universal service discounts. Community Colleges, for example, states that the Commission should adopt a "fresh look requirement" that would obligate carriers that have existing service contracts with schools and libraries to participate in a competitive bidding process. Community Colleges contends that such a requirement would be consistent with section 254(h)(2)'s requirement that the Commission establish competitively neutral rules.<sup>1415</sup> New York DOE supports the "establishment of a provision that can excuse schools and libraries from current contracts if it can be demonstrated that contracts would not permit the institutions to receive lower rates under the discounted programs."<sup>1416</sup> New York DOE reasons that institutions that negotiated long-term contracts prior to the passage of the 1996 Act should not be penalized.<sup>1417</sup> PacTel adds, however, that mandating a "fresh look" process may have a confiscatory effect on service providers that have not yet recovered costs that were to be amortized over the length of the contract, and recommends that schools and libraries electing to re-bid an existing contract be required to reimburse the original service provider for any out-of-pocket expenses that the provider has not yet recovered.<sup>1418</sup>

347. Some commenters assert that universal service discounts should not be applied to existing contract rates.<sup>1419</sup> Cox, for example, states that applying the discounts to existing contract rates would not be in the public interest because it would confer an inappropriate advantage upon incumbent LECs because they were most likely the only providers previously in a position to provide service to schools and libraries.<sup>1420</sup> ALTS supports requiring all schools and libraries with existing contracts that were not entered into pursuant to competitive bidding to participate in the competitive bidding process in order to receive section 254(h) discounts. ALTS states that "[t]he entire purpose of providing efficient low cost services to schools and libraries would be defeated if carriers not otherwise found to be eligible under [s]ection 214(e) were prevented from bidding on individual contracts for schools and libraries."<sup>1421</sup>

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<sup>1414</sup> Small Cable reply comments at 8-10.

<sup>1415</sup> Community Colleges comments at 18.

<sup>1416</sup> New York DOE comments at 10.

<sup>1417</sup> New York DOE comments at 10.

<sup>1418</sup> PacTel reply comments at 29.

<sup>1419</sup> *See, e.g.*, ALTS comments at 15-16; Cox comments at 12; Teleport comments at 8.

<sup>1420</sup> Cox comments at 12. *See also* Teleport comments at 8 (stating that applying discounts to existing contracts will effectively bar competitors from potentially lucrative markets and force schools and libraries to remain "captives" of the ILEC).

<sup>1421</sup> ALTS comments at 16.

### **g. Interstate and Intrastate Discounts**

348. Some commenters, particularly schools and libraries groups, support the Joint Board's recommendations that the Commission provide federal universal service support to fund intrastate discounts and that states be required to establish intrastate discounts at least equal to the discounts on interstate services in order for their schools and libraries to be eligible to receive federal universal service support.<sup>1422</sup> New York Public Library, for example, asserts that the Joint Board's recommendations provide "a very strong incentive for states to implement significantly reduced intrastate telecommunications rates for schools and libraries as mandated in the Telecommunications Act of 1996."<sup>1423</sup> EDLINC states that the Joint Board's approach "strikes an appropriate balance between federal and state prerogatives."<sup>1424</sup>

349. Other commenters, particularly state public utility commissions and at least one RBOC, state that the determination of state discounts should be left to the states.<sup>1425</sup> SBC, for example, cites section 254(h)(1)(B) as support for the position that only states can set the intrastate discount.<sup>1426</sup> Georgia PSC adds that the Joint Board's recommendation that the Commission grant waivers "does not cure the jurisdictional intrusion upon a State's discretion to make these determinations on its own."<sup>1427</sup> New York DOE states that "[t]he possible loss of state authority and flexibility, and the possible loss of revenues earned within the state, far outweigh any potential gains derived from a centralized, federal administrative oversight."<sup>1428</sup> New York DOE, therefore, supports allowing the states to retain the intrastate portion of

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<sup>1422</sup> See, e.g., Brooklyn Public Library comments at 6; EDLINC comments at 5; Great City Schools comments at 2; New York Public Library comments at 2; RTC comments at 38.

<sup>1423</sup> New York Public Library comments at 2.

<sup>1424</sup> EDLINC comments at 5.

<sup>1425</sup> See, e.g., Illinois CC comments at 3; New York DOE comments at 8; Oregon PUC comments at 3; SBC comments at 42; Wyoming PSC comments at 11-12; Georgia PSC reply comments at 26-27; New York DPS reply comments at 1-2.

<sup>1426</sup> SBC comments at 42. See also Georgia PSC reply comments at 26 (stating that "[s]ection 254(h)(1)(B) does not authorize the Joint Board or the Commission to condition support for discounted intrastate services upon adoption of the interstate discount schedule").

<sup>1427</sup> Georgia PSC reply comments at 27 n.70 (citing *Louisiana Public Service Commission v. Federal Communications Commission*, 476 U.S. 355 (1986) and 47 U.S.C. § 152(b) for the premise that "[a] State need not attempt to satisfy the Commission's waiver standard (see FCC Rule 1.3) in order to exercise authority already solely and exclusively vested with that State by Congress").

<sup>1428</sup> New York DOE comments at 8. See also New York DPS reply comments at 2 (opposing requirement that states adopt the federal discount matrix because "[t]o do so would effectively preempt the states' flexibility to design intrastate discount programs that complement current state aid formulas, legislative programs, private sector efforts, and the needs of each state's schools and libraries").

revenues that would be contributed to universal service support mechanisms and maintain responsibility for distributing those funds to eligible schools and libraries within their jurisdiction.<sup>1429</sup> Wyoming PSC states that it is solely within the competence of the states to determine discounts on intrastate services and that one of the strengths of the Act is that it relies on the states for their local expertise.<sup>1430</sup> Wyoming PSC also asserts that "[t]he Act intends to create a federal/state partnership and does not intend to turn states into clients of the federal government."<sup>1431</sup>

## **D. Restrictions Imposed On Schools and Libraries**

### **1. Comments**

350. Eligibility. Some commenters assert that additional entities should be eligible for the schools and libraries universal service discount program.<sup>1432</sup> Illinois Board of Education contends that otherwise ineligible members of consortia, such as institutions of higher education, should be entitled to receive universal service discounts on the portion of services they provide to eligible students. Illinois Board of Education cites the example of colleges that provide high-speed, high-bandwidth video services to elementary and secondary students and argues that "[a]llowing these institutions targeted discounts to provide services to eligible students will encourage even more partnerships to flourish."<sup>1433</sup> Community Colleges maintains that to the extent they teach programs focusing on basic educational skills, such as general equivalency diploma (GED) preparation, community colleges should be eligible to receive universal service support.<sup>1434</sup> Community Colleges also asks the Commission to permit community college libraries to receive universal service support to the extent they perform the same functions as a public library.<sup>1435</sup> People For and the Urban League support including a variety of community institutions and organizations, such as community computing and media centers and local Urban

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<sup>1429</sup> New York DOE comments at 8.

<sup>1430</sup> Wyoming PSC comments at 11-12. *See also* Oregon PUC comments at 3 (stating that "[i]t is entirely within the jurisdiction of the states to determine the discounts that are appropriate and necessary for intrastate services").

<sup>1431</sup> Wyoming PSC comments at 11-12.

<sup>1432</sup> *See, e.g.,* APTS comments at 5-6; Community Colleges comments at 5-6; Illinois Board of Education comments at 10-11; New York DOE comments at 9; People For comments at 10-11; Urban League comments at 5-6.

<sup>1433</sup> Illinois Board of Education comments at 10-11.

<sup>1434</sup> Community Colleges comments at 5-6.

<sup>1435</sup> Community Colleges comments at 11.



Leagues, among the entities eligible to receive schools and libraries discounts.<sup>1436</sup> Urban League asserts that "an access policy for low-income communities solely based on access via schools and libraries will adequately serve some communities while leaving out many other communities."<sup>1437</sup>

351. MassLibrary and APTS assert that a consortium including eligible schools and libraries should itself be eligible to receive universal service discounts.<sup>1438</sup> MassLibrary states that in Massachusetts, automated library resource sharing networks such as MassLibrary currently order telecommunications services on behalf of their members and such services can only be ordered and paid for by the consortium itself. MassLibrary expresses the concern that the Joint Board's recommendations will require such a system to dismantle in order to permit its school and library members to qualify for universal service support.<sup>1439</sup> Georgia PSC also expresses concern that the consortia provision of the Recommended Decision would not permit the state's telecommunications agency to receive universal service support.<sup>1440</sup> The Information Technology Division of Georgia's Department of Administrative Services (DOAS-IT), which is the state's telecommunications agency, serves as an aggregator for many local governments and their departments, including school districts. According to Georgia PSC, DOAS-IT secures term and volume discounts on telecommunications services for its customers, and if it is not eligible to participate in the schools and libraries discount program, the cost of telecommunications services will increase for members of DOAS-IT.<sup>1441</sup> NASTD adds that the Commission should clarify that state government telecommunications networks that serve as aggregators for eligible schools and libraries are acceptable consortia under section 254(h) and that schools and libraries participating in a statewide public network consortium are eligible to receive universal service support in addition to any other special pricing mechanisms in place as a result of participating in such a consortium.<sup>1442</sup> APTS contends that Congress intended to include distance-learning

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<sup>1436</sup> People For comments at 10-11; Urban League comments at 5-6. *See also* Benton reply comments at 5-6 (proposing that "the Commission recognize the benefits of lowering telecommunications operating expenses for community-based organizations such as community computing centers, PEG access centers, nonprofit technical assistance providers, community economic developers, distance learning and library consortia, low-income constituency human services organizations, and the like").

<sup>1437</sup> Urban League comments at 6.

<sup>1438</sup> APTS comments at 5-6; MassLibrary comments at 1-2.

<sup>1439</sup> MassLibrary comments at 2. *See also* Georgia Dept. of Administrative Services comments at 2 (stating its concern that "the Commission will inadvertently create rules which force the deaggregation of these volumes, thereby causing not only the cost to schools, libraries, and rural hospitals to rise, but also increasing the cost to state government and its other network and service users").

<sup>1440</sup> Georgia PSC reply comments at 27-29.

<sup>1441</sup> Georgia PSC reply comments at 27-29.

<sup>1442</sup> NASTD ex parte comments (February 12, 1997).

consortia as entities eligible to receive universal service support and that permitting educational television station licensees to qualify for universal service discounts will carry out that intent.<sup>1443</sup> SBC, however, states that the Act is very clear regarding the entities eligible to receive discounts under section 254(h), and "[t]he Commission has no authority to re-write the legislation by expanding this precise definition."<sup>1444</sup>

352. Some commenters maintain that the Commission should affirmatively encourage eligible schools and libraries to form partnerships with institutions of higher education.<sup>1445</sup> New York DOE recognizes that the Commission cannot include post-secondary and cultural institutions as eligible entities under the schools and libraries provisions, but encourages the Commission to strengthen incentives for the development of consortia by "allow[ing] educational institutions to assume the lead role in network planning and implementation, with associated costs recoverable from the Universal Service Fund."<sup>1446</sup> In addition, Benton urges the Commission to adopt clear language: (1) defining consortia of eligible and ineligible entities and which entities will be eligible for discounts; (2) delineating the potential benefits of participating in consortia; (3) addressing incentives for vendors to offer volume discounts to consortia; and (4) encouraging eligible entities to involve communities in preparing technology plans and their implementation.<sup>1447</sup>

353. Several commenters urge the Commission to address the eligibility of libraries in a manner consistent with the recently enacted Library Services and Technology Act.<sup>1448</sup> ALA, for example, states that the Library Services and Construction Act, which was referenced in section 254(h)(4) and from which the Joint Board developed its definition of library, was repealed and replaced with the Library Services and Technology Act. ALA also states that section 254(h)(4) was amended to reflect the enactment of the Library Services and Technology Act. ALA asserts that the Library Services and Technology Act clarified the definition of library, "and was specifically linked to the Communications Act as the operative definition of

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<sup>1443</sup> APTS comments at 5-6 (supporting extension of the definition of eligible entities to include public television stations "for the limited use of closed captioning services for captioning instructional programming to schools and libraries").

<sup>1444</sup> SBC reply comments at 23. *See also* BellSouth comments at 38 (supporting the Joint Board's recommendation that "the Commission adhere to the restrictions embodied in the 1996 Act regarding what entities are entitled to obtain discounts under [s]ection 254(h)(1)(b)").

<sup>1445</sup> *See, e.g.*, New York DOE comments at 9; Vanderbilt reply comments at 5.

<sup>1446</sup> New York DOE comments at 9.

<sup>1447</sup> Benton reply comments at 6-7.

<sup>1448</sup> *See, e.g.*, ALA comments at 9-10; EDLINC comments at 6 n.8; NCLIS comments at 11; North Dakota State Library comments at 1.

libraries within universal service."<sup>1449</sup> Colorado LEHTC states that academic libraries, which are included within the LSTA definition of library, "will have no difficulty in separating their costs of telecommunications services from that of the higher education institution of which they are a part."<sup>1450</sup> NCLIS also notes the enactment of the Library Services and Technology Act and states that the Commission may want to review the National Center for Education Statistics' definition of public libraries in order to define libraries for the purposes of section 254(h).<sup>1451</sup>

354. One commenter addresses the eligibility of private and parochial schools to receive universal service support.<sup>1452</sup> West Virginia Consumer Advocate notes that the Elementary and Secondary Education Act, which provides the definition of elementary and secondary schools for purposes of section 254(h), states that a school's eligibility for universal service support is dependent on whether it is a school under state law.<sup>1453</sup> Because state laws vary regarding whether private and parochial schools are schools under state law, West Virginia Consumer Advocate asks what test should be used to determine whether private or parochial schools are eligible for universal service support under section 254(h). Arguing that the intent of the law was to provide support to as many schools as possible, West Virginia Consumer Advocate asserts that "a presumption should be established that all schools are eligible for the discount under [s]ection 254 of the Act, unless it can be shown that a particular school is not providing elementary and secondary education `as determined under State law.'"<sup>1454</sup>

355. NTIA contends that the Commission should strive to ensure that schools established under tribal authority receive discounted rates under the schools and libraries

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<sup>1449</sup> ALA comments at 13. *See also* Colorado LEHTC reply comments at 1 (supporting the use of the LSTA definition for libraries and library consortia).

<sup>1450</sup> Colorado LEHTC reply comments at 2.

<sup>1451</sup> NCLIS comments at 11. The definition to which NCLIS refers is as follows:

A public library is established under state and enabling laws or regulations to serve the residents of a community, district, or region. A public library is an entity that provides at least the following: 1.) an organized collection of printed or other library materials, or a combination thereof; 2.) a paid staff to provide and interpret such materials as required to meet the informational, cultural, recreational, and/or educational needs of a clientele; 3.) an established schedule in which services of the staff are available to clientele; and 4.) the facilities necessary to support such a collection, staff, and schedule.

*Id.* (citing National Center for Educational Statistics E.D. Tabs - Public Libraries in the United States: 1993 at 109 (Sept. 1995)).

<sup>1452</sup> *See* West Virginia Consumer Advocate comments at 1-12.

<sup>1453</sup> West Virginia Consumer Advocate comments at 10.

<sup>1454</sup> West Virginia Consumer Advocate comments at 11-12.

program.<sup>1455</sup> NTIA notes that the 187 schools funded by the Bureau of Indian Affairs are included within the total number of schools cited by the Joint Board, but that there may also be other schools established by tribes or tribal organizations that should be eligible for universal service support.<sup>1456</sup> According to NTIA, "[t]elecommunications technology can help to reduce many of the disparities facing the more than 550 tribes, including geographic isolation and significantly higher rates of unemployment, poverty, and high school dropouts."<sup>1457</sup>

356. Several commenters assert that universal service support should specifically be targeted to schools and libraries serving individuals with disabilities.<sup>1458</sup> Universal Service Alliance states that "the Commission should provide universal service support for specialized equipment and additional services when needed by schools and libraries to serve children with disabilities."<sup>1459</sup> Consumer Action argues that universal service support should be provided for hardware, software, and specialized customer premises equipment used by deaf and hard of hearing children.<sup>1460</sup> Consumer Action also contends that rate discounts should be used to enhance access to educational technologies for children with disabilities.<sup>1461</sup>

357. Resale. Some commenters support the Joint Board's recommendation that all resale of discounted services be prohibited.<sup>1462</sup> Ameritech, for example, states that "[p]ermitting resale would either permit schools or libraries to make a `profit' on these services or would confer the benefit of the discount on otherwise ineligible parties." Other commenters, however, contend that the prohibition on resale should be more narrowly interpreted.<sup>1463</sup> EDLINC suggests that eligible entities be permitted to apply to the Commission or the universal service administrator for waivers of the prohibition on resale if the purchaser of the discounted services

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<sup>1455</sup> NTIA reply comments at 26-27.

<sup>1456</sup> NTIA reply comments at 27 n.52.

<sup>1457</sup> NTIA reply comments at 27 (stating that "closer examination by the Commission of universal service policies and general telecommunications regulations, as they affect tribes, is warranted in order to ensure that no community in need is left behind").

<sup>1458</sup> See, e.g., United Cerebral Palsy Ass'n comments at 8-10; Universal Service Alliance comments at 6-7; Consumer Action reply comments at 2-3.

<sup>1459</sup> Universal Service Alliance comments at 6. See also United Cerebral Palsy Ass'n comments at 10 (urging the Commission "to ensure that where Federal support mechanisms are established for classrooms and libraries, such support should include provision for telecommunications services which are accessible to children with disabilities").

<sup>1460</sup> Consumer Action reply comments at 2.

<sup>1461</sup> Consumer Action reply comments at 2.

<sup>1462</sup> See, e.g., Ameritech comments at 22; RTC comments at 38; Seattle comments at 2.

<sup>1463</sup> See, e.g., EDLINC comments at 18; Vermont PSB comments at 20; Washington SPI comments at 1.

is using them for "a clearly defined and segregable educational purpose."<sup>1464</sup> Vermont PSB contends that user fees, such as computer laboratory fees, should be permitted and should not be subject to the prohibition on resale. Vermont PSB also states that, since the Joint Board recommended against providing a 100 percent discount on any services, "[s]chools and libraries should not be prohibited from charging as necessary to recover the remaining undiscounted costs."<sup>1465</sup> Washington SPI emphasizes that restrictions on resale should be defined narrowly enough to permit eligible and ineligible entities to aggregate demand for telecommunications services.<sup>1466</sup>

358. As noted above, numerous commenters support the Joint Board's recommendation to allow schools and libraries to participate in consortia with both eligible and ineligible entities for the purpose of aggregating demand.<sup>1467</sup> AT&T, on the other hand, asserts that the Commission should limit the permissible range of consortia to include only eligible schools, eligible libraries, and municipalities.<sup>1468</sup> AT&T states that consortia present the risk of abuse of the prohibition on resale, as well as the possibility of significantly increasing enforcement and auditing costs.<sup>1469</sup>

359. Other commenters question aspects of the Joint Board's recommendation regarding consortia and its impact upon the prohibition on resale.<sup>1470</sup> Ameritech and BellSouth oppose the Joint Board's recommendation that carriers be responsible for ensuring that the appropriate discounts are applied to members of consortia because the related administrative costs would likely be reflected in higher costs for services.<sup>1471</sup> USTA asserts that the consortium itself, as a result of its decision to combine eligible and non-eligible entities, is the entity that

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<sup>1464</sup> EDLINC comments at 18.

<sup>1465</sup> Vermont PSB comments at 20.

<sup>1466</sup> Washington SPI comments at 1.

<sup>1467</sup> *See, e.g.*, ALA comments at 9; Alliance for Community Media comments at 10; BellSouth comments at 39-40; Community Colleges comments at 21; EDLINC comments at 5; Florida Dept. of Management Services comments at 1-2; Georgia Dept. of Administrative Services comments at 2; MassLibrary comments at 1; Washington Library comments at 8; Washington UTC comments at 8-9.

<sup>1468</sup> AT&T comments at 22. *See also* SBC reply comments at 23 (stating that AT&T's recommendation that consortia be limited to schools, libraries, and municipalities "has considerable merit").

<sup>1469</sup> AT&T comments at 22-23. *See also* SBC reply comments at 23 (stating that "[w]hile SBC recognizes the public policy benefits of permitting consortia, the Commission should balance these benefits against the administrative costs of enforcing that Act's clear prohibition against resale").

<sup>1470</sup> *See, e.g.*, BellSouth comments at 39-40; MassLibrary comments at 1-2; Washington Library comments at 7-8.

<sup>1471</sup> Ameritech comments at 23; BellSouth comments at 38-39.

must be held responsible and liable for certifying the appropriate usage of its members.<sup>1472</sup> MassLibrary asks the Commission to clarify what the Joint Board intended when it stated that schools and libraries could join consortia with other customers "in their community." MassLibrary recommends that the Commission interpret that language to refer to a service area, rather than to a single city or town.<sup>1473</sup> Washington Library asserts that "flexibility in establishing discounts" will encourage the use of consortia. Washington Library notes, for example, that libraries within Washington State will eventually be able to take advantage of a statewide kindergarten through grade 20 (K-20) network, and it contends that libraries in that state need the flexibility to secure services through such a network and other sources.<sup>1474</sup>

360. Bona Fide Request for Educational Purposes. Numerous commenters support the Joint Board's recommendation that schools and libraries be required to comply with several self-certification requirements.<sup>1475</sup> Ameritech maintains that the self-certification requirements will "help to ensure that universal service funds are used efficiently and only for the purposes intended" and "should create no additional burden on the school or library."<sup>1476</sup> Teleport contends that the self-certification requirements will "mitigate any concern that the promise of 'free' money to buy attractive new telecommunications services might encourage unnecessary purchases simply because the money appears to be readily available."<sup>1477</sup> New York Public Library characterizes the proposed self-certification process as a "simple, efficient, and effective methodology" that lessens the administrative burden on schools and libraries.<sup>1478</sup> NCTA asserts that "[t]aken as a whole, these three [self-certification] requirements are the minimum requirements the Commission could adopt to safeguard the public interest in ensuring that only eligible entities receive funding, that resources are not wasted, and that applicable statutory guidelines are followed."<sup>1479</sup>

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<sup>1472</sup> USTA comments at 38. *See also* PacTel comments at 52-53 (stating that "[p]lacing responsibility for this recordkeeping with the schools and libraries themselves is most consistent with the Joint Board's 'self-certification' mechanism"); SBC reply comments at 24 (stating that "[m]embers of the consortia are in the best position to manage this process and should be responsible for the proper use of services to ensure that non-eligible institutions are not receiving the benefits of the Act's discount framework").

<sup>1473</sup> MassLibrary comments at 1.

<sup>1474</sup> Washington Library comments at 7.

<sup>1475</sup> *See, e.g.,* Ameritech comments at 22-23; Business Software Alliance comments at 3; MCI comments at 17; New York Public Library comments at 2; RTC comments at 38-39; Teleport comments at 10; NCTA reply comments at 15-18.

<sup>1476</sup> Ameritech comments at 23.

<sup>1477</sup> Teleport comments at 10.

<sup>1478</sup> New York Public Library comments at 2.

<sup>1479</sup> NCTA reply comments at 18.

361. EDLINC maintains that existing procurement procedures should be sufficient to ensure that telecommunications services are ordered by authorized personnel, but also understands the Joint Board's concern with the potential for waste, fraud, and abuse.<sup>1480</sup> EDLINC asserts, therefore, that any certification requirements adopted by the Commission should not be so burdensome as to create disincentives for schools and libraries to order discounted services, nor should such requirements increase institutional costs. EDLINC recommends that the Commission develop a short and simple self-certification form addressing eligibility.<sup>1481</sup>

362. Other commenters contend that the Commission should adopt a certification process simpler than the one recommended by the Joint Board.<sup>1482</sup> Vermont PSB expresses the concern that the self-certification process recommended by the Joint Board may be so administratively burdensome and time-consuming that needy institutions, particularly in rural areas, may be discouraged from applying for discounted services.<sup>1483</sup> Vermont PSB recommends, therefore, that "[a] waiver of these various requirements or a streamlined process (akin to IRS Form 1040EZ) for small organizations may strike a reasonable balance."<sup>1484</sup>

363. New York DOE suggests simplifying the self-certification process by just requiring every school and library applying for discounted services to submit its technology plan to its state education agency.<sup>1485</sup> New York DOE asserts that the technology plan would contain all of the self-certifications contained in the Recommended Decision, as well as the priorities of the state's long-range technology plan, and would result in a "comprehensive and consistent planning approach to telecommunications and technology deployment that would have learning and teaching as the focus."<sup>1486</sup> New York DOE states further that "[t]o require a separate set of certifications for these new components of service would create a substantial reporting burden on schools and libraries and it could serve to separate this kind of accountability from those

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<sup>1480</sup> EDLINC comments at 16-17.

<sup>1481</sup> EDLINC comments at 17.

<sup>1482</sup> *See, e.g.*, CEDR comments at 17; EDLINC comments at 17; New York DOE comments at 9; Ohio DOE comments at 6; Southern Adirondack Library System comments at 1-2; Vermont PSB comments at 19.

<sup>1483</sup> Vermont PSB comments at 19. *See also* Southern Adirondack Library System comments at 1-2 (stating that the recommended self-certification requirements will favor large organizations with grant-writing staff and will "further enlarge an already large, bureaucratic and expensive administrative effort proposed in the Recommended Decision").

<sup>1484</sup> Vermont PSB comments at 19 (defining a small organization as one using less than 10 lines).

<sup>1485</sup> New York DOE comments at 9.

<sup>1486</sup> New York DOE comments at 9.

requirements already imposed by state education agencies."<sup>1487</sup>

364. On the other hand, TCI contends that self-certification is "not sufficient to protect either the amount of resources at stake or the importance of the social goals at risk."<sup>1488</sup> TCI maintains, therefore, that a request will only be considered bona fide if it establishes that the school or library has accounted for connectivity, internal connections, hardware, software, training, overcoming societal and cultural barriers, and ongoing operations support.<sup>1489</sup> TCI also asserts that schools and libraries must be required to submit their plans to a designated state agency for review and approval. According to TCI, "[a]bsent comprehensive and bona fide technology and service plans approved by a state representative or agency, there is grave danger that the substantial investment in educational support would be wasted."<sup>1490</sup> EDLINC, however, asserts that the plan TCI is promoting is identical to the USTA plan that was rejected by the Joint Board and, therefore, warrants no further consideration by the Commission.<sup>1491</sup>

365. Time Warner suggests that, to avoid abuse of the discount program, the Commission should establish guidelines outlining what constitutes "educational purposes" under section 254(h).<sup>1492</sup> EDLINC and AFT, on the other hand, oppose any such efforts.<sup>1493</sup> AFT suggests that schools and libraries be required to develop their technology plans in accordance with one or more of existing federal education statutes,<sup>1494</sup> while EDLINC asserts that "[b]y their very nature as schools and libraries, every activity in which such institutions engage should be presumed to be for an educational purpose."<sup>1495</sup>

366. Auditing. Some commenters address how the Commission should use audits to

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<sup>1487</sup> New York DOE comments at 9. *See also* Ohio DOE comments at 6 (stating that state education agencies should be the recipients of technology plans because such an approach "would assure accountability and prevent duplication of effort at the federal level, while insuring the state's ability to coordinate the Universal Service initiative with state technology plans").

<sup>1488</sup> TCI comments at 7.

<sup>1489</sup> TCI comments at 7.

<sup>1490</sup> TCI comments at 8.

<sup>1491</sup> EDLINC reply comments at 15.

<sup>1492</sup> Time Warner comments at 35-36 (also stating that the Commission should "seek comment on the scope of the term 'for educational purposes'").

<sup>1493</sup> AFT reply comments at 3; EDLINC reply comments at 14.

<sup>1494</sup> AFT reply comments at 3 (*citing* the Improving America's Schools Act; the Goals 2000: Education America Act; the Carl D. Perkins Vocational and Applied Technology Education Act; the School-to-Work Opportunities Act; and the Individuals with Disabilities Education Act).

<sup>1495</sup> EDLINC reply comments at 14.



ensure that schools and libraries comply with the requirements of the Act.<sup>1496</sup> Vanguard supports the Joint Board's recommendation that random audits be used to ensure compliance with Commission rules. Vanguard states further that failure to track adequately the use of universal service funds will substantially increase the size of universal service support mechanisms and may prevent eligible entities from obtaining funding.<sup>1497</sup> TCI asserts that the Joint Board's recommendation should be expanded to require all eligible schools and libraries receiving universal service support to file annual reports, which would be subject to audit, with a designated state agency.<sup>1498</sup> According to TCI, "[i]f such an approach were implemented, the Commission should also send a clear message that it is prepared to invoke its legal authority to fine or otherwise discipline those administrators and institutions which make misrepresentations to the Commission as to the use of the subsidized services."<sup>1499</sup> EDLINC contends, however, that such an annual filing requirement would be "burdensome and unnecessary" because the Joint Board's recommended auditing requirement will be sufficient to address the unlikely occurrence of fraud or abuse.<sup>1500</sup>

367. Annual Carrier Notification Requirement. No parties commenting on the Recommended Decision address the issue of an annual carrier notification requirement.

## **E. Funding Mechanisms for Schools and Libraries**

### **1. Comments**

368. Separate Funding Mechanisms. Some commenters support the Joint Board's recommendation that the universal service administrator distribute support for schools and libraries from the same source of revenue used to support other universal service purposes under section 254.<sup>1501</sup> Ameritech adds that proper accounting and targeting of the funds would have to be undertaken.<sup>1502</sup> Other commenters assert that the Commission should establish a separate funding mechanism for schools and libraries.<sup>1503</sup> SNET maintains that "[t]he proposed education subsidy is new and its funding should not be commingled with the current implicit and explicit

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<sup>1496</sup> See, e.g., TCI comments at 13; Vanguard comments at 7-8.

<sup>1497</sup> Vanguard comments at 7-8.

<sup>1498</sup> TCI comments at 12-13.

<sup>1499</sup> TCI comments at 13 (footnote omitted).

<sup>1500</sup> EDLINC reply comments at 15.

<sup>1501</sup> See, e.g., Ameritech comments at 23; New York DOE comments at 9.

<sup>1502</sup> Ameritech comments at 23.

<sup>1503</sup> See, e.g., SNET comments at 6-7; TCA comments at 8; Colorado LEHTC reply comments at 5.

subsidies."<sup>1504</sup> SNET also asserts that the schools and libraries discount program can be more easily evaluated if the funds are kept separately from other universal service funds.<sup>1505</sup>

369. Offset versus Reimbursement. Ameritech states that entities providing services at a discount should be able to receive compensation through either reimbursement or an offset to their universal service obligations. According to Ameritech, however, it would not be competitively neutral to permit entities that do not contribute to universal service support mechanisms to receive reimbursement for services provided to schools and libraries.<sup>1506</sup> ITI, on the other hand, citing anti-competitive concerns, states that "the Commission cannot establish any reimbursement mechanism for carriers who provide Internet access if non-carriers who provide the same services are excluded from the mechanism."<sup>1507</sup>

370. GTE objects to the Joint Board's recommendation to require schools and libraries to pay only the undiscounted portion of their bill so that service providers receive the balance through either reimbursement or offset from the universal service administrator.<sup>1508</sup> That is, GTE maintains that requiring service providers to modify their customer records and billing systems to reflect partial payment from schools and libraries and partial payment from the universal service administrator could discourage providers from bidding for schools' and libraries' business. GTE suggests instead that service providers be able to collect the entire amount of their bill directly from schools and libraries, leaving the educational institutions to be reimbursed by the administrator; GTE contends that this would not be unduly burdensome for schools and libraries.<sup>1509</sup> EDLINC, however, states that the Joint Board considered and rejected a similar proposal.<sup>1510</sup> EDLINC also asserts that GTE's proposal violates section 254(h) because eligible schools and libraries are entitled to discounts and service providers are entitled to payments from universal service support mechanisms.<sup>1511</sup> Further, EDLINC states that requiring schools and libraries to pay the entire amount of their bills would be unduly burdensome to schools and libraries because they would have to budget for that substantial amount of money and await reimbursement at some much later date.<sup>1512</sup>

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<sup>1504</sup> SNET comments at 6.

<sup>1505</sup> SNET comments at 7.

<sup>1506</sup> Ameritech comments at 23-24.

<sup>1507</sup> ITI comments at 6.

<sup>1508</sup> GTE comments at 102-104.

<sup>1509</sup> GTE comments at 103.

<sup>1510</sup> EDLINC reply comments at 15.

<sup>1511</sup> EDLINC reply comments at 15-16.

<sup>1512</sup> EDLINC reply comments at 16.

## **F. Access to Advanced Telecommunications and Information Services**

### **1. Comments**

371. LCI proposes a definition of "advanced telecommunications services" that would not include the "core" services eligible for high cost support under section 254(c)(1). LCI states that "the Commission should clarify that 'advanced telecommunications services' does *not* include voice grade access to the public switched network, DTMF or touch-tone, single-party service, access to emergency service, access to operator service, access to interexchange service and access to directory assistance."<sup>1513</sup>

372. New York DOE disagrees with the Joint Board's assertion that the schools' and libraries' discount program will automatically stimulate demand for more advanced services.<sup>1514</sup> To the contrary, New York DOE asserts that the discount program may simply make more affordable the same services that service providers already provide in a particular region and may not result in broader access to advanced services. New York DOE maintains that Congress's intent in enacting section 254 was to facilitate schools' and libraries' use of technologies requiring expanded bandwidth and to increase technological sophistication, but that the Joint Board's recommendation contains no assurances that these developments will happen. According to New York DOE, "[a]t a minimum, the FCC should be expediting the development of a collaborative proceeding with consumers and providers to identify competitively neutral strategies for promoting access to and use of advanced telecommunications services for schools and libraries."<sup>1515</sup>

## **G. Sections 706 and 708 of the 1996 Act**

### **1. Comments**

373. California Dept. of Consumer Affairs and GI expect that section 706 will be addressed in a separate proceeding but nonetheless comment on its merits.<sup>1516</sup> GI states that the Commission has the opportunity to advance simultaneously the goals of sections 254 and 706 by making Internet access and advanced services eligible for universal service support.<sup>1517</sup> California Dept. of Consumer Affairs urges both the Commission and state commissions to implement section 706 quickly, asserting that schools and libraries will not reap the full benefits

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<sup>1513</sup> LCI comments at 10.

<sup>1514</sup> New York DOE comments at 10.

<sup>1515</sup> New York DOE comments at 10.

<sup>1516</sup> California Dept. of Consumer Affairs reply comments at 13-15; GI reply comments at 3-4.

<sup>1517</sup> GI reply comments at 3-4.

of the section 254(h) discount mechanism until section 706 is implemented.<sup>1518</sup> California Dept. of Consumer Affairs also contends that section 706's definition of advanced telecommunications capability "lends support to those interested parties who argue that the Commission should not allow universal service funds to be used to fund wiring in schools because doing so favors wireline technology over wireless technology."<sup>1519</sup> Further, California Dept. of Consumer Affairs states that section 706 does not contain an additional funding mechanism for providing advanced telecommunications services to schools and libraries.<sup>1520</sup>

374. Alliance for Public Technology and Universal Service Alliance criticize the Joint Board's recommendation that section 706 be considered in a separate proceeding.<sup>1521</sup> According to Alliance for Public Technology, "[t]he Joint Board's decision to isolate [s]ection 706 for further consideration violates Congressional recognition that network deployment is an integral part of reaching the Act's goal of ensuring access to advanced telecommunications services for all Americans and will drive the nation in the direction of an information rich/poor society."<sup>1522</sup> Universal Service Alliance states that "[s]ections 706 and 254 should *not* be rigidly compartmentalized" because both statutory provisions strive to achieve the common goal of "ensuring that *all* Americans have access to affordable basic and advanced services in a competitive environment."<sup>1523</sup> In its reply comments, Universal Service Alliance notes that encouraging community involvement in the integration of technology into schools and libraries is one way that the Commission could, in the context of section 254, encourage the deployment of advanced services, as contemplated in section 706.<sup>1524</sup>

375. United States Senator Charles S. Robb states that the goals of the National Education Technology Funding Corporation, which are described in section 708, should be incorporated in the universal service program for schools and libraries. Senator Robb encourages the Commission to "examine specific mechanisms, new or existing, to facilitate the purpose of this funding corporation, which includes leveraging resources to provide important assistance to elementary and secondary schools and encouraging private investment in education technology infrastructure."<sup>1525</sup>

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<sup>1518</sup> California Dept. of Consumer Affairs reply comments at 14.

<sup>1519</sup> California Dept. of Consumer Affairs reply comments at 15.

<sup>1520</sup> California Dept. of Consumer Affairs reply comments at 15.

<sup>1521</sup> Alliance for Public Technology comments at 18-19; Universal Service Alliance comments at 8-9.

<sup>1522</sup> Alliance for Public Technology comments at 18-19.

<sup>1523</sup> Universal Service Alliance comments at 8-9.

<sup>1524</sup> Universal Service Alliance reply comments at 5-7.

<sup>1525</sup> Charles S. Robb reply comments at 3.

## **H. Implementation**

### **1. Comments**

376. Numerous commenters support the Joint Board's recommendation that the Commission adopt rules that will permit schools and libraries to begin using discounted services ordered pursuant to section 254(h) at the start of the 1997-1998 school year.<sup>1526</sup> New York DOE, however, notes that many schools and libraries may choose to delay investing in telecommunications and networking infrastructure until the "full impact" of the universal service proceeding is known, given the potential for significant savings. New York DOE notes further that "[t]his delay could have potentially devastating consequences for near term capacity building, precisely at the time when these services are needed the most."<sup>1527</sup>

## **XI. HEALTH CARE PROVIDERS**

### **A. Overview**

The following is a summary of the comments relating to universal service support for rural health care providers.

### **B. Services Eligible for Support**

#### **1. Comments**

377. Medical Applications Using Telecommunications Services. Several commenters describe medical applications or functions that they assert currently use or require telecommunications services.<sup>1528</sup> Some commenters ask us to designate the Advisory Committee's "market basket" of essential telemedicine services for support.<sup>1529</sup> Others request additions thereto, and still others submit similar recommendations without reference to the Advisory Committee's report.<sup>1530</sup> For example, Kansas Hospital Association endorses the

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<sup>1526</sup> See, e.g., ALA comments at 3; Alliance for Distance Education comments at 2; Brooklyn Public Library comments at 1; Illinois State Library comments at 1; Mississippi comments at 2; Ohio DOE comments at 6; Washington Library comments at 8.

<sup>1527</sup> New York DOE comments at 10.

<sup>1528</sup> See e.g., AAMC comments at 2-3; AHA comments 5; Alaska PSC comments at 5; Ameritech comments at 25; Kansas Hospital Association comments at 1; Nebraska Hospitals comments at 1-2; Nurse Practitioners comments at 2-3; RTC comments at 45-46; St. Alexius comments at 1.

<sup>1529</sup> See e.g., AAMC comments at 1; AHA comments at 1; Kansas DHE comments at 1-2; Kansas Hospital Association comments at 1; United Health Services comments at 1-2.

<sup>1530</sup> See e.g., Alliance for Public Technology comments at 27-30.

Advisory Committee's list but would also include support for home care and "rural-to-rural" connections,<sup>1531</sup> explaining that the long distances that make it difficult for rural health care providers to deliver critical home care services also cause these providers to rely on each other, rather than hospitals in urban centers, for consultations.<sup>1532</sup> RTC recommends its own list of services that includes clinical interactive video consultation, management and transport of patient information, links between rural facilities and library resources, access to on-line patient medical histories, and easier access to insurance data.<sup>1533</sup>

378. Nurse Practitioners list the following "basic telecommunications tools" that they assert are needed for patient care in rural, as well as urban, settings: 1) the ability to send and receive non-radiologic still images for patient assessment and consultation; 2) the ability to send and receive diagnostic quality physiologic sounds (*e.g.*, heart, lung) from patients to health care professionals; 3) the ability to send and receive synchronous, two-way audio and video of instructional and educational quality for health professional education; 4) the ability to use high speed transmission of outputs of patient data collection and monitoring devices (*e.g.* EKG, vital signs); and 5) the ability to send body fluid smear images to remote diagnostic labs for assessment.<sup>1534</sup> ITC asserts that "the quality of transmitted x-ray, CAT Scan and MRI detail must be of diagnostic quality," and that "[o]n-line video transmission of emergency room surgical procedures must be such that professional guidance can be provided from experts in the distant city."<sup>1535</sup>

379. Numerous commenters involved in public health fields assert that the health-related services that public health agencies provide -- including the prevention and control of epidemics, and the coordination of the public response to disasters such as toxic spills, floods, and tornadoes -- should be eligible for support. These commenters state that in times of disaster, having instant access to information from each other and agencies like FEMA, CDC, and the FDA, will prevent disease and save lives, so that the ability to communicate electronically throughout the state and nation is imperative.<sup>1536</sup> Representing state and territory health officials,

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<sup>1531</sup> Kansas Hospital Association comments at 1.

<sup>1532</sup> Kansas Hospital Association comments at 1.

<sup>1533</sup> RTC comments at 45.

<sup>1534</sup> Nurse Practitioners comments at 1-2; North Dakota DOH comments at 1-2; RTC comments at 45-46.

<sup>1535</sup> ITC comments at 9.

<sup>1536</sup> See APHA comments at 1; Ford County Health Department comments at 1; Grant County Health Department comments at 1; Gray County Health Department comments at 1; Livingston County Public Health Department comments at 1; Marquette County Health Department comments at 1; Mitchell County Health Dept. comments at 1; Osage County Health Department comments at 1; Osborne County Health Department comments at 1; Phillips County Health Department comments at 1; Russell County Health Department comments at 1; Stanton County Health Department at 1. See also HHS comments at 2 (describing public health services -- including transmission of preventive health data, reports of epidemiological investigations, guidelines for delivery

ASTHO asserts that the term "health care" should be interpreted broadly to include non-clinical, population-based public health services.<sup>1537</sup> ASTHO adds that a "core responsibility" of the public health system is the collection and dissemination of public health data to appropriate local, state, and federal entities.<sup>1538</sup>

380. Determining the Scope of Necessary Telecommunications Services. In responding to the question in the Public Notice about how best to determine "the exact scope of telecommunications services necessary for the provision of health care services in a state," AHA and other commenters report difficulty in finding more than anecdotal evidence upon which to base an answer. AHA reports that it is "extremely difficult, if not impossible," to respond to the question, because health care needs and the methods of delivery of health services vary across states and among local communities.<sup>1539</sup> AHA asserts that there is "very little evaluative data regarding what exactly works, what doesn't and under what circumstances with regard to telecommunications for health care" and even less regarding non-health care delivery applications for teaching and administration.<sup>1540</sup> American Telemedicine states that "[t]he required connectivity speeds for the delivery of health care varies widely depending on the type of medical service being delivered, immediacy of need, and quality of equipment used on both ends of the transmission."<sup>1541</sup>

381. Some commenters contend that the Commission should not designate or limit services for support.<sup>1542</sup> U S West, for example asserts that the Commission "should avoid mandating particular services or modes of service delivery in ways that would limit customer choice, risk 'locking in' obsolete technologies, or hamper the most efficient results by unwisely favoring some technologies over others."<sup>1543</sup> Several parties maintain that support mechanisms should "permit health care service providers the flexibility to choose the service that best suits

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of preventive services, training materials, and emergency notices; professional tele-consultation with two-way interactive audio and video, access to health data and information via Internet, and multi-point consultation for health emergencies -- as health care services requiring and eligible for supported telecommunications services).

<sup>1537</sup> ASTHO comments at 1.

<sup>1538</sup> ASTHO comments at 2.

<sup>1539</sup> AHA comments at 5.

<sup>1540</sup> AHA comments at 4.

<sup>1541</sup> American Telemedicine comments at 2.

<sup>1542</sup> See, e.g., Fred Williamson comments at 5; iSCAN, L.P. comments at 5; United Health Services comments at 2; U S West comments at 50-51.

<sup>1543</sup> U S West comments at 50.

their specific needs."<sup>1544</sup> Similarly, several parties contend that the Commission should not restrict the scope of supported services to a particular bandwidth or technology that might become obsolete.<sup>1545</sup> United Services suggests that setting such limits on support might inhibit the development or deployment of new technologies.<sup>1546</sup> To avoid these consequences, United Services suggests defining supported services in broad, practical terms.<sup>1547</sup> West Virginia Consumer Advocate criticizes the Joint Board for implying that rural health care providers should be limited to a pre-approved menu of services.<sup>1548</sup>

382. Some commenters suggest limiting the definition of necessary telecommunications services in various ways. USTA states that "the statute recognizes the distinction between 'necessary'. . . and . . . 'desirable'" and that only necessary services should be supported.<sup>1549</sup> Citing the requirement of section 254(c)(1)(C) that to be eligible for core universal service support, a telecommunications service must be "commercially available in urban areas,"<sup>1550</sup> USTA and PacTel agree that "[t]o be considered a 'necessary' telecommunications service," the requested service should be "commercially available and deployed within a carrier's network, and subscribed to by a majority of urban health care providers."<sup>1551</sup> BellSouth agrees and would add the requirement that necessary services "in a State" must be widely deployed in telecommunications networks.<sup>1552</sup> SBC would limit support to only those services that 1) are "required" and "used solely" to enhance delivery of patient care or are used for patient diagnostic activities and treatment, and 2) have been subscribed to by a majority of health care providers in urban markets.<sup>1553</sup> Several ILECs contend that only telecommunications services supporting clinical-care medical services should be eligible for

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<sup>1544</sup> U S West comments at 51; *see also* Sprint comments at 22 (contending that Commission should establish modest list of initial services, then allow market to determine whether demand exists for additional, more sophisticated services); Wyoming PSC comments at 12 (proposing that the exact scope of services should be determined by relevant health care providers based on actual local needs).

<sup>1545</sup> Fred Williamson comments at 5; United Health Services comments at 2; U S West comments at 50-51.

<sup>1546</sup> United Health Services comments at 2.

<sup>1547</sup> United Health Services comments at 2.

<sup>1548</sup> West Virginia Consumer Advocate comments at 13.

<sup>1549</sup> USTA comments at 39.

<sup>1550</sup> *See* 47 U.S.C. § 254(c)(1)(C).

<sup>1551</sup> PacTel comments at 54; USTA comments at 39-40.

<sup>1552</sup> BellSouth comments at 41.

<sup>1553</sup> SBC comments at 10.



support.<sup>1554</sup> AT&T asserts that only the hospital's "administrative network, i.e., the networks used to deliver patient care, and not the alternative network used to provide telecommunications services to patients in their rooms," should be eligible for support.<sup>1555</sup>

383. Alternatively, some commenters propose other methods of determining which services are "necessary for the provision of health care." Some commenters suggest letting the carriers decide the level of services to be deployed to health care providers.<sup>1556</sup> SBC suggests allowing carriers to work with health care providers to determine the technologies and services that will best serve their needs.<sup>1557</sup> Contending that the needs for health care delivery, infrastructure, and service will vary greatly, University of Nevada School of Medicine suggests that the Commission require that a committee be established in each state to define the services and needs for that state. Under this plan, each state would provide specific recommendations to a task force appointed by the Commission, which would gather information through state offices of rural health and other telemedicine projects and meet to refine these issues in order to develop national standards and variations.<sup>1558</sup>

384. Limitations Based on Bandwidth. The majority of commenters agree that limitations on supported services for health care providers might appropriately be based on bandwidth.<sup>1559</sup> Of these, virtually all either support, or make recommendations similar to, the Advisory Committee's recommendation,<sup>1560</sup> that the Commission limit universal service support

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<sup>1554</sup> See Ameritech comments at 25 (asserting that televisions in patients' rooms are not necessary or eligible for support); PacTel comments at 54 (asserting that "bedside services" such as patient phones for personal use in hospitals should not be eligible under § 254(h)(1)(A)); SBC comments at 10 (proposing to add general administrative lines to list of unnecessary services).

<sup>1555</sup> AT&T comments at 24 n.15.

<sup>1556</sup> See PacTel reply comments at 29; SBC reply comments at 25; Sprint reply comments at 4.

<sup>1557</sup> SBC reply comments at 25.

<sup>1558</sup> University of Nevada School of Medicine comments at 1-2.

<sup>1559</sup> See, e.g., Alaska PUC comments at 5; Ameritech comments at 25; Apple comments at 4; BellSouth comments at 41 (stating "this does not necessarily mean that all services up to DS1 would automatically qualify for support"); HHS comments at 2-4; LCI comments at 13; MCI comments at 19 (stating that "support should be limited to advanced services such as T-1 service"); SBC comments at 10; University of Nevada School of Medicine comments at 1 (urging that "support should be provided to rural communities for services of at least the equivalent of T-1 capacity due to the cost implications and lack of availability of multiple switched lines"); USTA comments at 39-40 (endorsing recommendation that "necessary communications services should be limited to those supporting a capacity of up to and including 1.544 Mbps speed or its equivalent"); U S West comments at 51.

<sup>1560</sup> Advisory Committee Report at 1-2.

to services that employ transmission speeds up to and including 1.544 Mbps or its equivalent.<sup>1561</sup> HHS agrees with the Advisory Committee's recommendation and adds that the Commission should allow providers to choose any service up to the 1.544 Mbps ceiling for any health-care-related application the provider determines to be necessary.<sup>1562</sup> HHS emphasizes the need to provide bandwidths high enough to transmit high-quality images and deliver fully interactive video.<sup>1563</sup> Ameritech likewise supports a 1.544 Mbps bandwidth limitation, stating that it has noted "a number of telemedicinal applications"<sup>1564</sup> that utilize services at speeds ranging from 384 Kbps to 1.544 Mbps and that services up to and including that range should satisfy the overwhelming majority of applications."<sup>1565</sup> Several other commenters agree that a full range of telemedicine services requires transmission speeds of up to 1.544 Mbps.<sup>1566</sup> Nebraska Hospitals, adding that the "opposing forces operating on telemedicine" make 1.544 Mbps a reasonable bandwidth, explains that "improved compression technology has the effect of reducing required bandwidth, while on the other hand, development of new technologies in medicine increases the need for bandwidth."<sup>1567</sup>

385. Other commenters distinguish among different bandwidth needs for different medical functionalities.<sup>1568</sup> American Telemedicine asserts that although most telemedicine

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<sup>1561</sup> See, e.g., Alaska PUC comments at 5; Ameritech comments at 25; Apple comments at 4; BellSouth comments at 41; HHS comments at 2-4; LCI comments at 13; MCI comments at 19; SBC comments at 10; University of Nevada School of Medicine comments at 1; USTA comments at 39-40. The comments sometimes refer to the digital transmission rate 1.544 Mbps as T-1 or DS-1 service.

<sup>1562</sup> HHS comments at 2-4.

<sup>1563</sup> HHS comments at 2-4.

<sup>1564</sup> For purposes of this Order, we take the terms "telemedicine," "telehealth," "telemedicinal applications," and "telemedicine-related services," to be interchangeable.

<sup>1565</sup> Ameritech comments at 25.

<sup>1566</sup> See Apple comments at 4; Illinois DPH comments at 2; NACCHO comments at 1 (asserting that T-1s are needed for all rural areas); Nebraska Hospitals comments at 2; PacTel reply comments at 29; Rural Wisconsin Health Cooperative comments at 2; St. Alexius comments at 1 (asserting importance of setting the minimum bandwidth at 1.544 Mbps because less bandwidth delays image transmission and causes "jerkiness" in picture quality when patient moves that interferes with ability accurately to diagnose and treat patient).

<sup>1567</sup> Nebraska Hospitals comments at 2.

<sup>1568</sup> See e.g., American Telemedicine comments at 2; Alaska PSC comments at 5 (asserting that a minimum of 128 Kbps to 384 Kbps data lines should be available to allow store and forward technologies for data transfer, but 384 Kbps to 1.544 Mbps data services are needed for video conferencing and teleradiology at larger rural health care facilities that may serve as regional hubs for remote locations); Nebraska Hospitals comments at 1 (asserting that although 56 Kbps lines are currently sufficient for transmitting health-care-related information, 1.544 Mbps is most appropriate and cost effective service for real-time video between patients, doctors, and specialists, and for simultaneous transmission of multiple, high-resolution X-ray-type studies, where transmission time may be critical to injured person).

functions can be accomplished with a bandwidth of 112 Kbps,<sup>1569</sup> transmission speeds up to T-1 levels should be made available to "rural hospitals and academic medical centers" to facilitate live video conferencing and continuing medical education for rural health providers.<sup>1570</sup> American Telemedicine contends that 1.544 Mbps capacity "is primarily needed for medical consultations requiring live, interactive video with high quality images," but that applications using "store and forward" transmission of still images require far slower transmission speeds.<sup>1571</sup> Kansas Hospital Association supports the Advisory committee's recommendation on supporting 1.544 Mbps services, its experts, however, agree that 384 kbps is the minimum needed for interactive video technology.<sup>1572</sup>

386. Only one commenter suggests that a bandwidth limitation at some level below 1.544 Mbps might be appropriate. U S West, which prefers that the Commission set no limit on supported services, contends that if the Commission decides to mandate a particular service, the Commission should designate Private Line Transport Service (PLTS) at 56/64 Kbps. U S West asserts that this level of bandwidth "will adequately meet the various needs of rural health care providers."<sup>1573</sup> Both PacTel and American Telemedicine, which previously suggested that limiting support to ISDN levels would be sufficient,<sup>1574</sup> now acknowledge that some carriers might find it more cost effective to provide services up to T-1 speeds<sup>1575</sup> and that 1.544 Mbps is necessary for some real-time interactive emergency and diagnostic-quality video applications.<sup>1576</sup>

387. Services Requiring Bandwidth Higher Than 1.544 Mbps. Only iSCAN L.P. seeks support for services requiring bandwidth higher than 1.544 Mbps.<sup>1577</sup> iSCAN L.P. states that the Commission should avoid limiting services to 1.544 Mbps because iSCAN L.P. provides

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<sup>1569</sup> See American Telemedicine comments at 2, n 2 ("This rate was derived using an ISDN line with merged channels, increasing the normal ISDN transmission from 64 Kbps to 112 Kbps" to double the rate over normal phone lines.").

<sup>1570</sup> American Telemedicine comments at 2.

<sup>1571</sup> American Telemedicine comments at 2-3.

<sup>1572</sup> Kansas Hospital Association comments at 1-2.

<sup>1573</sup> U S West comments at 51. *But compare* Association for Computing Machinery comments at 1 ("The telecommunications bandwidth required to support real-time access and/or high resolution medical imagery is among the highest required for any computing application so the issue is more than simply universal service, high bandwidth is also needed").

<sup>1574</sup> See PacTel NPRM comments at 9; PacTel comments at 54.

<sup>1575</sup> PacTel reply comments at 29.

<sup>1576</sup> American Telemedicine comments at 3.

<sup>1577</sup> See iSCAN L.P. comments at 3-5.

services at higher bandwidths that might cost less or provide higher quality.<sup>1578</sup> For example, iSCAN L.P. asserts that it provides a technology that offers bandwidth above 1.544 Mbps that does not require video compression equipment costing tens of thousands of dollars as do modem-based services like T-1.<sup>1579</sup> iSCAN L.P. further states that transmitting X-rays requires bandwidth higher than 1.544 Mbps but that the extra cost of higher bandwidth may be justified by the savings resulting from the ability of more experienced doctors to provide second opinions.<sup>1580</sup>

388. Several commenters express doubt that services transmitting at bandwidths higher than 1.544 Mbps are necessary to provide health care services at the present time.<sup>1581</sup> For example, Kansas Hospital Association "agree[s] completely with the Advisory Committee that the relative costs [of supporting higher bandwidths] would be higher than the benefits."<sup>1582</sup> Indeed, Kansas Hospital Association suggests that if bandwidths higher than 1.544 Mbps are supported, the opportunity cost will be that areas needing greater access to minimum-levels of bandwidth will suffer at the expense of high-bandwidth users.<sup>1583</sup> Nebraska Hospitals concurs that "[s]upporting bandwidth greater than 1.544 Mbps would appear to offer relatively small additional return in improved health care to the rural residents."<sup>1584</sup> Apple, which advocates limiting support to 1.544 Mbps for the present, asserts that "[i]n the near future, universal service will have to comprise a full range of additional digital services, with bandwidths ranging between at least 45 and 100 Mbps."<sup>1585</sup>

389. Bifurcated Support. Some commenters contend that we should provide different levels of support for different categories of health care providers. For example, characterizing its proposal as a cost-saving measure, AT&T asserts that "rural hospitals providing secondary care and above" should receive access to a level of service consistent with T-1 capacity (1.544 Mbps) and that rural primary care providers should receive access to telecommunications

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<sup>1578</sup> iSCAN, L.P. comments at 3-5.

<sup>1579</sup> iSCAN, L.P. comments at 5-6.

<sup>1580</sup> iSCAN, L.P. comments at 5-6.

<sup>1581</sup> See, e.g., AAMC comments at 1-2; Ameritech comments at 25; BellSouth comments at 13; Kansas Hospital Association comments at 2; Nebraska Hospitals comments at 2; MCI comments at 19; SBC comments at 4; USTA comments at 39; Wyoming PSC comments at 13 ("The cost of low volume usage would in many cases exceed the ability to pay for [bandwidth higher than 1.544 Mbps.]).

<sup>1582</sup> Kansas Hospital Association comments at 2.

<sup>1583</sup> Kansas Hospital Association comments at 2.

<sup>1584</sup> Nebraska Hospitals comments at 2.

<sup>1585</sup> Apple comments at 4.

services up to ISDN or similar technology.<sup>1586</sup>

390. Internet Access. Numerous commenters agree with the Advisory Committee<sup>1587</sup> that the telecommunications link providing access to an Internet service provider is a telecommunications service necessary for the provision of health care services by rural health care providers.<sup>1588</sup> American Telemedicine asserts that there is no doubt that the Internet will play an increasing role in the use of telemedicine in the years ahead.<sup>1589</sup> SBC and Georgia PSC contend that Internet access itself is not a telecommunications service and therefore is not eligible for support.<sup>1590</sup> BellSouth and USTA, on the other hand, acknowledge that the telecommunications component of Internet access is eligible for support.<sup>1591</sup>

391. Infrastructure Development and Upgrade. Most commenting on this subject urge the Commission to reject the Advisory Committee's recommendation,<sup>1592</sup> supported by some members of Congress and Senate sponsors of the 1996 Act,<sup>1593</sup> to use universal service support mechanisms to build or upgrade the public switched network or backbone

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<sup>1586</sup> AT&T comments at 23; *see also* ORHP/HHS NPRM comments at 8-9 (stating that rural hospitals providing secondary care and above should receive T-1 services, while rural primary-care clinics, should receive services at 64 to 128 Kbps, with emergency capacity up to 384 Kbps).

<sup>1587</sup> Advisory Committee Report at 4, 6-7.

<sup>1588</sup> *See, e.g.*, AAMC comments at 1, 2; AHA comments at 1 (urging the Commission to adopt recommendations of Advisory Committee, including Internet access); American Telemedicine comments at 4; APHA comments at 1, 3-5 (stating that telecommunications access, including Internet applications, is important to public health); HHS comments at 2; Nebraska Hospitals comments at 1 (stating that access to the Internet is necessary to provide access to numerous sources of medical information and to distribute health-care-related information); Alaska Telemedicine Project reply comments at 7; NTIA reply comments at 29; Scott & White reply comments at 1; *see also* letter from Senators Olympia J. Snowe, J. Robert Kerrey, and John D. Rockefeller IV, primary sponsors of the Snowe-Rockefeller-Exon-Kerrey provision of the 1996 Act, to Chmn. Reed E. Hundt, FCC, dated January 9, 1997, at 1 (Senate January 9 *ex parte*) at 2 (supporting local toll rates for Internet access); Letter from Senator Kent Conrad et al., Congress of the United States, to Chmn. Reed E. Hundt, FCC dated January 10, 1997 (Congressional January 10 *ex parte*) at 2 (asserting that the intent of § 254(h)(1)(A) is that "providers receive access to the Internet as quickly as possible, and that they not wait for the marketplace which may not respond to the communications needs of rural communities").

<sup>1589</sup> American Telemedicine comments at 4.

<sup>1590</sup> SBC comments at 10; Georgia PSC reply comments at 2-30, citing AT&T comments at 24.

<sup>1591</sup> BellSouth comments at 43; USTA comments at 40.

<sup>1592</sup> *See* Advisory Committee Report at 3, 8; Recommended Decision, 12 FCC Rcd at 421.

<sup>1593</sup> *See* Senate January 9 *ex parte* at 1 (Strongly supporting the use of universal service support mechanisms to fund the construction or upgrade of infrastructure); Congressional January 10 *ex parte* at (strongly recommending that the Commission allow universal service support to be used for telemedicine infrastructure development to the fullest extent possible).

infrastructure.<sup>1594</sup> These commenters contend that supporting network buildout would be contrary to the provisions of section 254(h).<sup>1595</sup> Several commenters assert that section 254(h)(1)(A) does not provide a support mechanism that would allow for network buildout or upgrade.<sup>1596</sup> Others contend that section 254(h)(2)(A) likewise does not permit the funding of such activities that are not telecommunications services.<sup>1597</sup> Several commenters assert that supporting network buildout and upgrade for rural areas would be too costly and would unnecessarily burden the universal service support mechanisms.<sup>1598</sup> PacTel adds that funding network buildout would not be economically reasonable under section (h)(2)(A),<sup>1599</sup> and NCTA asserts that alternative technologies such as broadband cable services or wireless may be more efficient than wireline services.<sup>1600</sup>

392. Several commenters contend that funding network buildout and upgrade would not be competitively neutral as required by section 254(h)(2)(A).<sup>1601</sup> They assert that only ILECs would receive such support and that carriers receiving such support would receive a substantial competitive advantage, because they could use the funds that they otherwise would have used to upgrade their rural networks to support competitive services in other areas.<sup>1602</sup> In addition, some commenters contend that supporting network buildout and upgrade would be unfair to those carriers that have upgraded their networks without support or those that have

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<sup>1594</sup> See, e.g., AT&T comments at 25; Bell Atlantic comments at 19; Georgia PSC comments at 30-31; MCI comments at 19; NCTA comments at 23-24; Nebraska Hospitals comments at 3; SBC comments at 11; WorldCom comments at 33; AirTouch reply comments at 32-33; Ameritech reply comments at 30; BANX reply comments at 24; WorldCom reply comments at 17.

<sup>1595</sup> See BellSouth comments at 44 (asserting that nothing in § 254(h) would permit such a use of universal service funds).

<sup>1596</sup> MCI comments at 19; *see also* BellSouth comments at 44; NCTA comments at 24 ("no record evidence that such construction is necessary"); PacTel comments at 58 ("inconsistent with the statute"); SBC comments at 11 ("beyond the scope of authority under the Act").

<sup>1597</sup> AT&T comments at 25-26; *see also* Ameritech comments at 27 (asserting that Congress did not intend to fund modernization of networks in rural areas through the mechanism of § 254(h)(2)).

<sup>1598</sup> See Ameritech comments at 31; Bell Atlantic comments at 19; SBC comments at 11; Ameritech reply comments at 30; U S West comments at 49.

<sup>1599</sup> PacTel comments at 58.

<sup>1600</sup> NCTA comments at 24.

<sup>1601</sup> See Ameritech comments at 27; AT&T comments at 26; BellSouth comments at 45-46; NCTA comments at 23-24; PacTel comments at 58; Ameritech reply comments at 9.

<sup>1602</sup> See AT&T comments at 26; NCTA comments at 23-24; Ameritech reply comments at 9.

entered into state-sponsored programs to build out the network.<sup>1603</sup> Several commenters urge us to let natural market forces operate to provide any needed infrastructure upgrades.<sup>1604</sup> Some assert that the availability of universal service support will provide the necessary incentive for carriers to invest in the infrastructure necessary to extend needed services to rural areas and that this deployment will be achieved at a lower cost and with less waste than if it were attempted through regulation<sup>1605</sup>

393. Some commenters approve of mandated extension of services to unserved areas so long as carriers are compensated for their construction costs. Ameritech distinguishes between requiring carriers to conduct general network upgrades, which it opposes, and requiring carriers to extend service, on a case-by-case basis, to currently unserved customers.<sup>1606</sup> Ameritech asserts that if a health care provider requests a service "not yet available in the rural area," the rural health care provider, not universal service support mechanisms, should fully reimburse the carrier for any required "special construction charges."<sup>1607</sup> U S West states that the Commission should not require services to be deployed in areas where they are not currently offered unless carriers are reimbursed from universal service support mechanisms for the up-front construction costs.<sup>1608</sup>

394. Support for Other Specific Services. AHA and PacTel agree with the Joint Board's recommendation to support terminating as well as originating services when terminating services are billed to the health care provider, as in the case of cellular air time charges.<sup>1609</sup> AT&T and SBC support the Joint Board's recommendation that non-telecommunications services be excluded from the list of services to be supported for health care providers.<sup>1610</sup>

395. Use of Other Technologies. Some commenters suggest providing support for non-wireline technologies. Cylink suggests that the relative costs of providing digital links, which common carriers may employ to provide service to rural areas and to facilitate the provision of rural health care and distance-learning communications, can be reduced through the use of "unlicensed spread spectrum, non-consumer, point-to-point links" made possible with

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<sup>1603</sup> See Ameritech comments at 27; BellSouth comments at 45-46; PacTel comments at 59-60.

<sup>1604</sup> See, e.g., SBC comments at 11; USTA comments at 40-41.

<sup>1605</sup> See Ameritech comments at 28; BellSouth comments at 45; USTA comments at 41.

<sup>1606</sup> See Ameritech comments at 26-28; U S West comments at 49.

<sup>1607</sup> See Ameritech comments at 26-27.

<sup>1608</sup> See, e.g., U S West comments at 51-52.

<sup>1609</sup> See Recommended Decision, 12 FCC Rcd at 421; AHA comments at 5; PacTel comments at 54.

<sup>1610</sup> AT&T comments at 24; SBC comments at 10.

Cylink equipment.<sup>1611</sup> Alaska PSC reports that it is heavily dependent on satellite communications to provide links between remote, rural health care providers and regional health care services.<sup>1612</sup>

396. Comparative Cost of Services With Capacities of up to 1.544 Mbps. HHS agrees with the Advisory Committee that the Commission need not limit the amount of services to be funded for individual health care providers.<sup>1613</sup> HHS contends that providing universal service funding to health care providers will not generate tremendous demand for sophisticated telecommunications services, because rural health care providers and local health departments have very limited budgets and are likely to be extremely cost conscious when requesting services.<sup>1614</sup>

397. U S West reports that the monthly cost of providing Private Line Transport Service at the DS-0 speeds (56/64 Kbps) into a Frame Relay network fifty miles away from a business customer would be approximately \$180.00. Service to the same customer at DS-1 speeds (1.544 Mbps) would cost approximately \$1288.06 or over seven times as much.<sup>1615</sup> Citing a recent study by Abt Associates for the federal Office of Rural Health Policy, AHA states that most telemedicine networks are complex, containing an average of four-spoke sites, two hubs, and four facilities to provide and receive consultations.<sup>1616</sup> Equipment costs, excluding switches and new lines, range from \$134,378.00 for spoke sites to \$287,503.00 for hub sites.<sup>1617</sup> Reported annual transmission costs range from an average of \$18,573.00 for spokes to \$80,068.00 for hubs. According to AHA, many rural hospitals, even acting through a consortium, would be unable to afford these infrastructure and transmission costs absent significant relief through the universal service support mechanisms.<sup>1618</sup> The Nevada Rural Hospital Project cites the equipment cost of interactive video, with appropriate diagnostic equipment, for the Nevada telecommunications project for rural providers ranging from

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<sup>1611</sup> Cylink comments at 1-3. Cylink explains that it manufactures and sells equipment for the support of non-consumer (marketed to common carriers, industrial concerns and governments), point-to-point digital links at less than the cost of conventional microwave technology.

<sup>1612</sup> Alaska PSC comments at 5.

<sup>1613</sup> Advisory Committee Report at 7; HHS comments at 2-4; West Virginia Consumer Advocate comments at 13.

<sup>1614</sup> HHS comments at 2-4; West Virginia Consumer Advocate comments at 13.

<sup>1615</sup> See letter from Glen Brown, US West, to William F. Caton, FCC, dated November 4, 1996 (U S West November 4 *ex parte*) at 1-2.

<sup>1616</sup> AHA comments at 3.

<sup>1617</sup> AHA comments at 3.

<sup>1618</sup> AHA comments at 3.



\$65,000.00 to \$100,000.00 per site.<sup>1619</sup> For each of its six to eight fiber-optic transmission lines with multiple switch 56 capability, the project incurred a \$200.00 per line hook-up charge and a monthly charge of \$40.00 per line, in addition to long distance rates, which varied by carrier and community.<sup>1620</sup>

398. High Plains Rural Health Network, which includes 13 rural and six urban health institutions, spends \$3,934.00 per month on one in-state point-to-point telemedicine connection.<sup>1621</sup> The Bassett Healthcare Telemedicine Network in New York spends from \$2,198.00 to \$4,087.00 per month for T-1 lines at different sites.<sup>1622</sup> Illinois DPH reports that it has incurred approximately \$1.2 million in additional costs annually to extend high speed links to the 72 local health departments located in rural areas of Illinois. iSCAN estimates the cost of its eight Mbps channel at over \$4,000.00 per month, compared to its estimate of T-1 service at \$1,968.00 per month.

399. Periodic Review. Several commenters emphasize the need for regular review of the services for which health care providers may receive support.<sup>1623</sup> AHA rejects the Joint Board's recommendation of review in the year 2001 and instead suggests that the Commission revisit the list of supported services within 18 months of issuance of the final regulations.<sup>1624</sup> HHS, supporting the review cycle recommended by the Advisory Committee, asserts that rapid development in the health sector and evolving telecommunications technology creates a need to reassess the "market basket" of essential applications within two years.<sup>1625</sup> HHS would also like a review to be completed before the end of a recently initiated three-year telemedicine demonstration sponsored by the Health Care Financing Administration, a major goal of which is to determine whether or how Medicare should cover such services.<sup>1626</sup>

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<sup>1619</sup> AHA comments at 3.

<sup>1620</sup> AHA comments at 3.

<sup>1621</sup> AHA comments at 3.

<sup>1622</sup> AHA comments at 3.

<sup>1623</sup> See AHA comments at 5; Congressional January 9 *ex parte* at 2 (contending that the intent of the statute is that Commission revisit "the issues of provider eligibility, eligible services, and infrastructure development on a regular basis, to ensure that both access and cost concerns are fairly balanced"); HHS comments at 4; ITC comments at 9 ("Above all others, this aspect of Universal Service support should be looked upon as evolving and in need of constant guidance and oversight by representatives of the medical profession, the telecommunications industry and the regulators"); Senate January 9 *ex parte* at 1 (supporting a flexible and frequently reviewed implementation program).

<sup>1624</sup> AHA comments at 5.

<sup>1625</sup> HHS comments at 4.

<sup>1626</sup> HHS comments at 4.

## C. Eligibility of Health Care Providers

### 1. Defining eligibility for health care providers.

#### a. Comments

400. Some commenters endorse the Joint Board's recommendation to limit eligibility to health care providers located in rural areas.<sup>1627</sup> Others propose that the Commission not limit support in such a manner. DC PSC contends that economically disadvantaged health care providers as well as those in high cost areas should be eligible for universal service support, irrespective of whether they are located in rural or urban areas.<sup>1628</sup> Colorado LEHTC asserts that the list of eligible health care providers should include teaching hospitals, located in urban areas, that benefit rural areas.<sup>1629</sup> Community Colleges argues that community colleges located in non-rural areas that provide health care instruction via distance learning should be eligible for universal service support. According to Community Colleges, "it is the very need for affordable telecommunications services to support distance learning capabilities that requires that community colleges that serve rural areas not be forced to pay elevated prices to deliver educational programming or to provide interactive instruction."<sup>1630</sup> Kansas Hospital Association urges the Commission to include urban medical schools and medical centers as eligible providers for two reasons. First, they contend that urban hospitals are the underlying source of the educational network for physicians and provide the access to specialty consultation that is not available to rural areas through any other means. Second, they assert that urban hospitals have assumed a disproportionate share of the cost of providing technology-based services to rural hospitals and providers. Much of the infrastructure investment, as well as the customer premises equipment, has been financially and technically supported by these urban facilities.<sup>1631</sup>

401. Similarly, Western Governors criticizes the Joint Board for "mistakenly" interpreting the term "health care provider" to include only those that are located in rural areas.<sup>1632</sup> Western Governors asserts that in defining an eligible provider as one that "serves persons who reside in rural areas," section 254(h)(1)(A) "does *not* limit the location of the

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<sup>1627</sup> See, e.g., AT&T comments at 25.

<sup>1628</sup> DC PSC comments at 2.

<sup>1629</sup> Colorado LEHTC comments at 3. See also Colorado PUC reply comments at 4 (suggesting that the definition of health care provider be corrected to include providers serving residents in rural areas, not just those located in rural areas).

<sup>1630</sup> Community Colleges comments at 20.

<sup>1631</sup> Kansas Hospital Association comments at 3-4.

<sup>1632</sup> Letter from Edward T. Schafer, Western Governors, to Chmn. Reed E. Hundt, FCC, dated March 5, 1997 (Western Governors March 5 *ex parte*) at 1-2.

provider."<sup>1633</sup> Western Governors further contends that limiting eligibility in the way that the Joint Board recommends would thwart the purpose of the statute by, for example, "limiting the delivery of specialty care to rural areas by urban teaching hospitals."<sup>1634</sup>

402. Some commenters challenge the statutory mandate to limit subsidies to entities that serve rural areas.<sup>1635</sup> HHS supports the Advisory Committee's recommendation that the Commission and Congress investigate whether incentives for the development of telehealth applications in underserved urban areas would be appropriate.<sup>1636</sup>

## **2. Defining rural areas.**

### **a. Comments**

403. Methods for defining rural areas. Two commenters generally endorse the use of the ORHP/HHS method of defining rural areas.<sup>1637</sup> LCI contends, however, that the Commission should adopt a definition of "rural areas" consistent with the definition of "service areas" or "study areas" of rural telephone companies under the Act.<sup>1638</sup> Criticizing the Joint Board's failure to recommend such an approach, LCI claims that LEC study areas are no more difficult to ascertain than boundaries of a municipality or census block.<sup>1639</sup>

404. The West Virginia Consumer Advocate strongly supports the Joint Board's recommendation that the Commission adopt the "Goldsmith Modification" of the MSA list in order to distinguish which health care providers are located in rural areas and are thus eligible for discounts on telecommunications services.<sup>1640</sup>

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<sup>1633</sup> Western Governors March 5 *ex parte* at 2 (Emphasis in original).

<sup>1634</sup> Western Governors March 5 *ex parte* at 2.

<sup>1635</sup> See HHS comments at 5; Mississippi Dept. of Health comments at 1.

<sup>1636</sup> HHS comments at 5.

<sup>1637</sup> AT&T comments at 25; West Virginia Consumer Advocate comments at 12.

<sup>1638</sup> LCI comments at 11-13 (*citing* 47 U.S.C. §153(37)).

<sup>1639</sup> LCI comments at 12.

<sup>1640</sup> West Virginia Consumer Advocate comments at 12.

405. Frontier Areas. ORHP/HHS,<sup>1641</sup> AHA,<sup>1642</sup> and High Plains RHN<sup>1643</sup> suggest giving special consideration to the unique circumstances of "frontier" areas with extremely low population densities which they define to include areas with fewer than six persons per square mile.

406. Insular areas. CNMI points out that the proposed definitions of urban and rural would not work for CNMI in part because CNMI does not have counties.<sup>1644</sup> CNMI argues that the Commission could declare Saipan as an urban area and Tinian and Rota as rural areas. Such a ruling, according to CNMI, would mean that the \$0.25 per minute charge for inter-island calls would be eligible for support.<sup>1645</sup> Similarly, Governor of Guam urges the Commission to address Guam's unique geographic situation in order to provide affordable telemedicine services.<sup>1646</sup> Governor of Guam points out that Guam does not conveniently fit into the Joint Board's recommendation for determining costs based on nearby urban areas because Guam has no designated metro areas under OMB's MSA listing.<sup>1647</sup> It suggests, therefore, that the Commission list as rural those insular areas not designated as metro in the OMB/MSA listing.<sup>1648</sup>

### **3. Definition of health care provider**

#### **a. Comments**

407. Scott & White states that the definition of health care provider must be as broad as possible and should not be based on criteria other than geographic location and populations served.<sup>1649</sup> Kansas Hospital Association contends that the Commission should include rural home care providers as eligible for universal service support.<sup>1650</sup>

### **D. Implementing Support Mechanisms for**

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<sup>1641</sup> ORHP/HHS NPRM comments at 5-6.

<sup>1642</sup> AHA comments at 5.

<sup>1643</sup> See High Plains RHN comments at 2.

<sup>1644</sup> CNMI comments at 22-24.

<sup>1645</sup> CNMI comments at 25-26.

<sup>1646</sup> Governor of Guam comments at 12.

<sup>1647</sup> Governor of Guam comments at 12-13.

<sup>1648</sup> Governor of Guam comments at 12-13.

<sup>1649</sup> Scott & White reply comments at 1.

<sup>1650</sup> Kansas Hospital Association comments at 3-4.

## **Rural Health Care Providers**

### **1. Identifying the applicable rural rate**

#### **a. Comments**

408. AT&T approves of the Joint Board's proposed method for determining the rural rate.<sup>1651</sup> In contrast, Illinois CC asserts that, because of the intrastate application of section 254(h)(1)(A), "state commissions are the appropriate entities to determine the comparability of rates in urban and rural areas of a given state and to fund such programs pursuant to section 254(f) and section 254(h)(1)(A)."<sup>1652</sup> For that reason, Illinois CC contends that the Commission should adopt only general guidelines regarding section 254(h)(1)(A) and allow the states to establish and fund additional intrastate universal service programs "for rural and high cost areas based on local conditions if appropriate."<sup>1653</sup>

### **2. Identifying the applicable urban rate**

#### **a. Comments**

409. Most commenters support the method for determining the urban rate recommended by the Joint Board.<sup>1654</sup> SBC maintains that, because of average pricing constructs, many rates are already equivalent between urban and rural areas, but agrees that to the extent that they are not, the Joint Board's recommendation is a reasonable way to ensure rural and urban comparability of rates.<sup>1655</sup> PacTel generally supports the Joint Board's recommendation but requests clarification as to which urban rate applies when the providing carrier does not serve the nearest urban area.<sup>1656</sup> PacTel also recommends that where there are no tariffed or publicly available rates in the city nearest the health care provider, the Commission should use the tariffed or publicly available rates in the nearest city in the state where such rates are available.<sup>1657</sup>

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<sup>1651</sup> See AT&T comments at 25.

<sup>1652</sup> Illinois CC comments at 3-4.

<sup>1653</sup> Illinois CC comments at 3.

<sup>1654</sup> See, e.g., AT&T comments at 24 (agreeing with Joint Board that urban rate should be based on highest rate tariffed or publicly available in nearest urban area within state); Bell Atlantic comments at 19; NCTA comments at 26-27 (agreeing with Joint Board's decision "with respect to defining the 'reasonably comparable' urban rate."); PacTel comments at 56-57; SBC reply comments at 26.

<sup>1655</sup> SBC reply comments at 24-27.

<sup>1656</sup> PacTel comments at 57.

<sup>1657</sup> PacTel comments at 57.

410. MCI disagrees with the Joint Board's recommendation and asserts that carriers should charge rural health care providers "no more than the TELRIC rate" for the same or comparable service in the nearest urban area.<sup>1658</sup>

411. Rates and distance-based charges. Many commenters support eliminating what they refer to as "distance-based charges," those charges added to the usual charges for telecommunications services provided in urban areas because of a health care provider's "distant location."<sup>1659</sup> The Senate sponsors of the Snowe-Rockefeller-Exon-Kerrey Amendment to the 1996 Act assert that the Act prohibits "the use of distance in determining transmission rates."<sup>1660</sup> American Telemedicine asserts that because Congress's intent in passing the 1996 Act was "to increase access to quality health care by reducing the cost of telecommunications to rural providers," failure to eliminate distance-based charges for these providers would "effectively thwart the intent of Congress" because such charges are the "primary difference" between urban and rural telecommunications costs.<sup>1661</sup> Nebraska Hospitals contends that "it is not primarily the difference in rates" that undercuts the rural health care providers' ability to provide telemedicine, but rather it is the mileage charge that makes the cost unmanageable for rural providers.<sup>1662</sup>

412. Few commenters submitted information regarding the cost of eliminating distance-based charges. Nebraska Hospitals proposed that the Commission could eliminate distance-based charges by providing rural health care providers with telecommunications links to their primary source for medical consultations.<sup>1663</sup> Nebraska Hospitals would calculate the "urban rate" for such telecommunications links based on the charge paid for a similar

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<sup>1658</sup> MCI comments at 19.

<sup>1659</sup> See AHA comments at 5; American Telemedicine comments at 5; Congressional January 10 *ex parte* at 1 (strongly urging Commission to adopt distance-neutral rate structure for rural telemedicine services); HHS comments at 2, 4 (noting that rural providers may be paying 10-20 times more for the same services because of the great distances involved); Illinois DPH comments at 2 (reporting that most Internet service providers are available for \$20.00 to \$30.00 per month, usually including five hours of access and that a \$.10 per minute distance charge would double the monthly cost); Kansas DHE comments at 1; Kansas Hospital Association comments at 2 (noting that access to an ISDN line in Topeka, 200 miles east and the nearest "point of presence" available, adds 40 percent to the basic bill for distance-based charges); Nebraska Hospitals comments at 3; St. Alexius comments at 1; University of Nevada School of Medicine comments at 1; Scott & White reply comments at 1; Senate January 9 *ex parte* at 1; University of Kentucky Center for Rural Health reply comments at 1.

<sup>1660</sup> See Senate January 9 *ex parte* at 1.

<sup>1661</sup> American Telemedicine comments at 5 (stating that "[e]qualizing the cost of accessing advanced telecommunications services between urban and rural areas must include factors that eliminate the "distance-penalty" paid by rural health care providers for each and every level of telecommunications service required by telemedicine from voice-grade to T-1 services").

<sup>1662</sup> Nebraska Hospitals comments at 2.

<sup>1663</sup> Nebraska Hospitals comments at 2.

telecommunications service by the urban health care provider located the farthest distance from its serving central office. For example, Nebraska Hospitals explains that the current charge in Nebraska to connect the most distant urban hospital to its central office switch using a T-1 line is \$644.64 per month. That amount would then become the charge for each T-1 circuit connecting each eligible rural health care provider to its primary source of medical consultation.<sup>1664</sup> Nebraska Hospitals estimates that the annual cost of eliminating the distance-based charges in this way for all hospitals and rural health clinics in Nebraska would be \$1,262,130.10.<sup>1665</sup> These figures are based on established or likely medical consultation patterns and assume a three-year phase-in of all eligible rural health care facilities.<sup>1666</sup> The estimate also takes into account the one-time installation costs for the necessary T-1 circuits (\$183,150.94), spread over a three-year period.<sup>1667</sup>

413. Several ILECs contend that section 254(h)(1)(A) precludes the Commission from providing support that covers fully, or even partially, distance-based charges.<sup>1668</sup> These commenters assert that the term "rates" refers to the charge for each element of a telecommunications service, rather than the total charges paid by a customer.<sup>1669</sup> BellSouth explains that "if the rate structure for a service includes a distance sensitive component, as long as the rate for that component is the same in both urban and rural areas, then there is no rate differential."<sup>1670</sup> PacTel adds that if, for example "an urban provider pays a rate of \$10.00 per mile for a distance sensitive service, the statute's only requirement is that a rural provider pay the same \$10.00 per mile *rate*," regardless of whether the rural provider ultimately pays a higher price based on its distance from the central office.<sup>1671</sup>

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<sup>1664</sup> Nebraska Hospitals comments at 2.

<sup>1665</sup> Nebraska Hospitals comments at 3.

<sup>1666</sup> Nebraska Hospitals comments at 3 (noting that we can reasonably assume that because not all health care providers will come onto the network at once, one-third the total amount would be used the first year, two-thirds of the total amount would be used the second year, and the total amount would be used the third year).

<sup>1667</sup> Nebraska Hospitals comments at 3.

<sup>1668</sup> See, e.g., AirTouch reply comments at 33; Ameritech comments at 25-27; PacTel comments at 3, 56 (stating that "[w]e advocate the equalization of distance-sensitive rates but not the mileage against which those rates are applied); Ameritech reply comments at 8; GCI reply comments at 14; PacTel reply comments at 30; SBC reply comments at 24-27 (stating that "it is unnecessary and beyond the confines of the Act to attempt to eliminate distance and usage-based rates from any carrier's pricing structures, especially for intrastate services.").

<sup>1669</sup> See Ameritech comments at 25-26; USTA comments at 40.

<sup>1670</sup> BellSouth comments at 42-43. See also SBC reply comments at 24-27 (contending that the Act doesn't imply that the rural health care provider's total bill is to be equal to a total bill for an urban health care provider but it implies that each rate assessed on a rural health care service is to be reasonably comparable to the equivalent urban rate).

<sup>1671</sup> PacTel comments at 56. (emphasis in original).

414. InterLATA charges. Some commenters assert that InterLATA charges are an impediment to telecommunications use for rural health care providers.<sup>1672</sup> Illinois DPH and University of Nevada School of medicine assert that interLATA charges are a major factor in telecommunications costs for rural health departments.<sup>1673</sup> American Telemedicine suggests exempting carriers serving rural health care providers from existing interLATA restrictions for the purpose of providing toll-free Internet access.<sup>1674</sup>

### **3. Competitive bidding**

#### **a. Comments**

415. Several commenters suggest that to select the carrier to provide the requested service, health care providers be required to use a process of competitive bidding much like the method the Joint Board recommended for schools and libraries.<sup>1675</sup> NCTA asserts that the Recommended Decision implies that the incumbent carrier will always be the provider of supported services and, to avoid this result, suggests that a competitive bidding process be used to select the telecommunications provider.<sup>1676</sup> NCTA contends that, under its proposal, the level of subsidy will never be larger than it would have been in the absence of competitive bidding.<sup>1677</sup> Some commenters assert that competitive bidding should not be used in areas served by rural telephone companies.<sup>1678</sup>

### **4. Insular areas and Alaska**

#### **a. Comments**

416. Insular areas. Both CNMI and the Governor of Guam assert that the unique telecommunications needs of the health care providers serving the residents of their territories were not addressed by the support mechanisms for rural health care providers recommended by the Joint Board.<sup>1679</sup> They contend that because neither Guam nor the Northern Mariana Islands

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<sup>1672</sup> See American Telemedicine comments at 4; Illinois DPH comments at 2; University of Nevada School of Medicine comments at 1.

<sup>1673</sup> Illinois DPH comments at 2; University of Nevada School of Medicine comments at 1.

<sup>1674</sup> American Telemedicine comments at 4.

<sup>1675</sup> See e.g., Cox comments at 9; NCTA comments at 26.

<sup>1676</sup> NCTA comments at 26.

<sup>1677</sup> NCTA comments at 26.

<sup>1678</sup> See e.g., Minnesota Coalition comments at 27-29.

<sup>1679</sup> See CNMI comments at 22-23; Governor of Guam comments at 13.



contain large cities, urban areas, counties, or county equivalents identified as "metropolitan" by OMB, and because both territories are nearly completely rural in character, the methods outlined in the Recommended Decision for defining urban and rural areas and for equalizing rates between them cannot be easily applied to these insular areas.<sup>1680</sup> These commenters assert that the telemedicine needs of the insular areas are great. CNMI reports that although its three government-run health centers on the islands of Saipan, Tinian, and Rota serve 4,000 patients per month, or seven percent of its total population of 58,846, it currently lacks the facilities, medical specialists, and trained personnel to provide advanced or specialized health care.<sup>1681</sup> For this reason, CNMI reports that it spent over seven million dollars in one year to transport by air 574 patients to Hawaii and Guam for medical treatment, thus subjecting "acutely ill or injured patients to treatment delays and transport-related risks to health and safety."<sup>1682</sup> CNMI asserts that it needs affordable telecommunications services to support high speed data transmission, provider-to-provider and provider-to-patient consultations, and diagnostic evaluations without the need for travel.<sup>1683</sup> The Governor of Guam asserts similarly that because of the great distances to major medical centers, Guam's need for supported telemedicine applications is compelling.<sup>1684</sup>

417. Both CNMI and the Governor of Guam suggest mechanisms by which to support the cost of telecommunications services for health care providers in CNMI, Guam, and other insular areas.<sup>1685</sup> The Governor of Guam suggests that the Commission designate as rural areas all those insular areas not listed as "metropolitan" areas in the OMB MSA list, and further designate a city on the west coast of the United States as the urban area for setting the "urban rate." The Governor of Guam further suggests that "for insular areas without urban medical centers," the Commission should consider designating telecommunications costs between the insular area's medical facilities and a supporting medical center in an urban area as services

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<sup>1680</sup> See CNMI comments at 22-23; Governor of Guam comments at 13; *see also* Interior reply comments at 2 (stating that "the Joint Board's definition of urban and rural are highly problematic for insular areas").

<sup>1681</sup> See CNMI comments at 18-19.

<sup>1682</sup> See CNMI comments at 19-20.

<sup>1683</sup> See CNMI comments at 21.

<sup>1684</sup> See Governor of Guam comments at 12.

<sup>1685</sup> See CNMI comments at 24-25; Governor of Guam comments at 13. CNMI suggests defining "insular areas as "islands that are territories or commonwealths of the United States or are quasi-independent nations that are associated with the United States by compact or other special arrangement." CNMI asserts that this definition includes American Samoa, Guam, the United States Virgin Islands, the Commonwealth of the Northern Mariana Islands, the Trust Territory of the Pacific Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and Puerto Rico. This definition is intended to exclude islands that are states, islands that are parts of states, and uninhabited islands or islands with no indigenous population. Letter from Thomas K. Crowe, counsel to CNMI, to William F. Caton, FCC, dated February 24, 1997 (CNMI Feb. 24 *ex parte*).

eligible for support.<sup>1686</sup> CNMI suggests that for health care providers in the Commonwealth, the Commission should support interstate services to Guam, Hawaii, and the mainland, pursuant to section 254(h)(2)(A).<sup>1687</sup> Alternatively, CNMI proposes that the Commission designate Saipan as an urban area and Tinian and Rota as rural areas. Pursuant to the latter approach, CNMI contends that universal service support mechanisms would support the \$0.25 per minute charge for inter-island calls.<sup>1688</sup> Both Guam and CNMI request universal service support for toll-free Internet access.<sup>1689</sup>

418. Puerto Rico. Puerto Rico reports that it is the largest United States possession, with a population of 3.74 million people.<sup>1690</sup> The government-owned Puerto Rico Telephone Company states that it provides services over 1.25 million access lines.<sup>1691</sup> Puerto Rico has metropolitan and nonmetropolitan areas with 28 municipalities listed by OMB as MSAs.<sup>1692</sup> Puerto Rico states that on its island are nine regional hospitals, eight of them in rural areas, and at least two medical colleges in San Juan, Puerto Rico's largest city.<sup>1693</sup>

419. Several commenters describe Alaska's particular telecommunications challenges and how they affect the ability of its health care providers to deliver health care services to Alaska residents. Alaska PUC asserts that "Alaska is the only state that is heavily dependent upon satellite communications to provide links between the majority of the remote, rural health care providers and the few regional hospitals and health care services." Alaska PUC explains that satellite transmission has several drawbacks, including time delay between the transmission and reception of signals, bandwidth restrictions, and high costs.<sup>1694</sup> Alaska PUC further explains that where affordable connectivity is available in rural Alaska, it is often limited to 9.6 Kbps, with some locations limited to 2.4 Kbps service, which Alaska PUC asserts is insufficient bandwidth capacity to support the needs of Alaska's rural health providers.<sup>1695</sup> Alaska PUC

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<sup>1686</sup> See Governor of Guam comments at 13.

<sup>1687</sup> See CNMI comments at 24-25.

<sup>1688</sup> See CNMI comments at 25-26.

<sup>1689</sup> See CNMI comments at 25 n. 70; Governor of Guam comments at 4-6.

<sup>1690</sup> Letter from Joaquin A. Marquez, Puerto Rico Telephone Company (PRTC), to William F. Caton, FCC, dated March 25, 1997 (PRTC March 10 *ex parte*) at attachment p. 6.

<sup>1691</sup> PRTC March 10 *ex parte* at attachment p.14.

<sup>1692</sup> See *Metropolitan Areas by State and County as Designated by OMB - June 30 1996* .

<sup>1693</sup> PRTC will provide documents to supplement their oral presentation of March 24, 1997.

<sup>1694</sup> See Alaska PUC comments at 4-5.

<sup>1695</sup> See Alaska PUC comments at 5.

contends that, at a minimum, 128 Kbps to 384 Kbps data lines should be available at a reasonable cost for store-and-forward technologies for data transfer and that 384 Kbps to 1.544 Mbps data services are needed for video teleconferencing and teleradiology at the larger rural health care facilities that may serve as regional hubs for remote locations with limited facilities.<sup>1696</sup> Alaska Telemedicine Project asserts that Alaska's telecommunications infrastructure must be improved to allow project members to send radiology images at affordable prices from all sites in rural Alaska, to perform clinical applications in collaborative arrangements, and to provide continuing medical and health care education at a distance.<sup>1697</sup>

420. Several commenters urge the Commission to establish a system of funding to ensure that critically needed services are both available and affordable to Alaska's rural health care providers, at rates comparable to those found for similar services in urban areas of Alaska.<sup>1698</sup> Alaska PUC asserts that a support mechanism based on a comparison between the toll and local rates in urban and rural areas would be insufficient. For example, Alaska PUC urges the Commission to recognize that most urban health care providers can transmit digital data to nearby hospitals at relatively inexpensive local rates, whereas a rural health care provider sending the same data via satellite to the closest hospital incurs distance-sensitive, toll charges reported to be \$5,000.00 per month or more.<sup>1699</sup> Similarly, the majority of rural health care providers in Alaska incur high toll and distance-based costs to access Internet service providers, while urban based health care providers can access Internet service providers through a local call.<sup>1700</sup> Alaska similarly requests support that would eliminate the difference in distance-sensitive charges between rural and urban areas and permit a carrier to acquire and deploy the infrastructure required to provide a requested service . . . at charges that are equivalent to the charges in [Anchorage]."<sup>1701</sup> In addition, Alaska requests support to connect the state's largest urban medical center in Anchorage with advanced specialty care and medical research activities available only in large metropolitan areas outside the state such as Seattle.<sup>1702</sup> Alaska also asserts that in many of the communities in which rural health care providers are located, "existing telecommunications infrastructure is insufficient to support telemedicine."<sup>1703</sup>

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<sup>1696</sup> See Alaska PUC comments at 5.

<sup>1697</sup> See Alaska Telemedicine Project reply comments at 5.

<sup>1698</sup> See Alaska PUC comments at 5; Letter from Robert M. Halperin, counsel for Alaska to William F. Caton, FCC, dated March 7, 1997 (Alaska March 7 *ex parte*) at att. 1, p. 6.

<sup>1699</sup> See Alaska PUC comments at 5 n.2.

<sup>1700</sup> See Alaska PUC comments at 5.

<sup>1701</sup> See Alaska March 7 *ex parte* at att. 1, p.6-7.

<sup>1702</sup> See Alaska March 7 *ex parte* at att. 1, p.3.

<sup>1703</sup> See Alaska March 7 *ex parte* at attachment 1, p.6.

## **E. Capping and Administering the Mechanisms**

### **1. Selecting Between Combined or Separate Support Mechanisms for Health Care Providers and for Schools and Libraries**

#### **a. Comments**

421. Frontier urges the Commission to combine rural health care and school and library support for federal funding purposes.<sup>1704</sup> In contrast, SNET and AT&T assert that there should be a separate fund for each purpose.<sup>1705</sup> SNET contends that the health care fund should be separate and distinct from other subsidy mechanisms, because it is an entitlement program.<sup>1706</sup> WorldCom urges the Commission to establish a separate fund for rural health care support that uses the same mechanism as the one proposed for schools and libraries, with discounts of 20 to 90 percent based on economic need and location.<sup>1707</sup>

### **2. Funding Cap**

#### **a. Comments**

422. Some commenters suggest capping the amount of support that can be expended on health care providers per year.<sup>1708</sup> AT&T, supported by Georgia PSC, asserts that a total cap and a per-institution cap are necessary to control the size of the overall program and to ensure that the amounts available for support are distributed equitably.<sup>1709</sup>

## **F. Restrictions and Administration**

### **1. Restrictions on Resale and Aggregated Purchases**

#### **a. Comments**

423. Two commenters express concerns about how the restrictions on the resale of telecommunications services will apply when a facility is used to provide service to both an eligible health care provider and to other entities that are not eligible for universal service support. Georgia Dept. of Admin. Services seeks assurance that eligible public health care

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<sup>1704</sup> Frontier comments at 3-4.

<sup>1705</sup> See AT&T comments at 25; SNET comments at 8.

<sup>1706</sup> See SNET comments at 8.

<sup>1707</sup> WorldCom comments at 33; see also South Carolina comments at 14-15 (contending that a scheme similar to the one proposed for schools and libraries would serve the goal of the 1996 Act.).

<sup>1708</sup> See AT&T comments at 25; Georgia PSC reply comments at 30; WorldCom comments at 31.

<sup>1709</sup> See AT&T comments at 25; Georgia PSC reply comments at 30.

providers in Georgia will still be able to use services currently provided at volume discounted rates by DOAS-IT (Information Technology Division of the Georgia Department of Administrative Services).<sup>1710</sup> DOAS-IT competitively procures, provides, and administers telecommunications and information system services to health care providers, public schools, technical schools and universities, law enforcement agencies and correctional facilities, and other state and local government agencies.<sup>1711</sup> DOAS-IT secures lower prices for its members by enabling them to share facilities and aggregating volumes to secure volume discounts.<sup>1712</sup>

424. Community Colleges seeks assurances that if telecommunications or advanced services are used to provide health care instruction and to support other educational activities, the Commission's rules will permit certifications that accommodate discounts on shared lines for that portion attributable to health care instruction. Community Colleges contends that, otherwise, it would be required to "over-subscribe" to telecommunications services by purchasing additional lines used solely for the provision of health care, in order to benefit from federal universal service support mechanisms.<sup>1713</sup> Community Colleges suggests requiring providers that use telecommunications connections for several purposes to maintain records of use to prevent fraud or misappropriation of universal service funds.<sup>1714</sup>

## **2. Bona Fide Requests**

### **a. Comments**

425. Additional Certification Requirements. Two commenters suggest imposing certification requirements beyond those proposed by the Joint Board.<sup>1715</sup> USTA states that "[a] bona fide request should include verifiable plans by the rural health care provider that it has considered and is able to utilize all related components of the telecommunications service needed to make the health care service function appropriately" and that it "has the necessary internal connections and customer premises equipment to make use of the requested services."<sup>1716</sup> BellSouth suggests that the Commission establish further guidelines to prevent frivolous and

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<sup>1710</sup> Georgia Dept. of Admin. Services comments at 2-4; Georgia Dept. of Admin. Services reply comments at 31-32 (explaining that disaggregating rural from urban hospitals would reduce savings from volume discounts).

<sup>1711</sup> Georgia Dept. of Admin. Services comments at 2.

<sup>1712</sup> For example, DOAS-IT would combine network long distance with local dialtone and a telephone set as a single "service." Georgia Dept. of Admin. Services comments at 2.

<sup>1713</sup> Community Colleges comments at 19.

<sup>1714</sup> Community Colleges comments at 19.

<sup>1715</sup> See BellSouth comments at 41; USTA comments at 40.

<sup>1716</sup> USTA comments at 40. See also PacTel comments at 56 (advocating that health care providers be required, as part of their "bona fide" request, to certify that they have supporting technology available to them).

wasteful requests, such as a requirement that each request be accompanied by a clear and concise statement of the health care need to be satisfied by the service. Moreover, BellSouth proposes that to establish a bona fide request, a health care provider should demonstrate that the requested service is widely used by health care providers in the state.<sup>1717</sup>

### **3. Selecting Between Offset or Reimbursement for Telecommunications Carriers**

#### **a. Comments**

426. Several commenters disagree with the Joint Board's recommendations to treat the amount eligible for support only as an offset against the carrier's universal service support obligation and to carry any offset balances forward to future years.<sup>1718</sup> NYNEX states that the mandatory offset rule is contrary to sections 254(h)(1)(B)(i) and (ii) of the Act, which allow a carrier the option of offset or reimbursement from the fund. NYNEX claims that it would be "confiscatory" to treat the amount eligible for support as an offset, because the carrier has no means of recovering its contributions from the ratepayers.<sup>1719</sup>

427. Several commenters contend that the Joint Board's recommendation against direct reimbursement for services and in favor of an offset violates the principle of competitive neutrality, because this approach discriminates against small carriers with universal service funding obligations insufficient to allow the carrier to receive the full offset in the current year.<sup>1720</sup> Alaska PSC notes that some of the smallest carriers will not contribute to universal service, because of the *de minimis* exemption provisions discussed in the Recommended Decision at paragraph 800,<sup>1721</sup> and therefore would never be compensated for their provision of telecommunications services at urban rates to health care providers. Moreover, Alaska PSC argues that the small companies that do contribute to universal service support mechanisms may not have the resources to fund internally the yearly difference between the discount and the contribution. According to Alaska PSC, the minimal amounts of contribution of such small carriers are unlikely ever to balance the discounts that may be made available to health care

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<sup>1717</sup> BellSouth comments at 41.

<sup>1718</sup> Alaska PSC comments at 3-4 (requesting that the Commission allow direct reimbursement of an eligible carrier's cost of providing discounts to health care providers when those costs exceed the carrier's contributions to the system); AMSC comments at 11 (arguing that carriers should be reimbursed for amounts exceeding the universal service contribution offset or, alternatively, should be permitted to substitute an agent or reseller that would be entitled to its offset); NYNEX comments at 24-25; United Utilities comments at 7.

<sup>1719</sup> NYNEX comments at 23-25.

<sup>1720</sup> Alaska PSC comments at 3-4; United Utilities comments at 7.

<sup>1721</sup> Recommended Decision, 12 FCC Rcd at 489 (recommending that the Commission exempt carriers for which the contribution [to the universal service support mechanisms] would be less than the cost of collection).

providers, leaving these companies to fund the difference.<sup>1722</sup>

## **F. Advanced Telecommunications and Information Services**

### **1. Comments**

428. Few commenters offer a definition of the services that should be included in "advanced telecommunications and information services" as that phrase is used in section 254(h)(2). Some contend that the Commission should not attempt to designate or define specific advanced services, but instead should allow market forces to select more efficiently the best services,<sup>1723</sup> or should rely on a separate proceeding under section 706 of the Act.<sup>1724</sup> One commenter contends that because the statute only requires the Commission to establish rules to "enhance . . . access" to such services, rather than to support the services themselves, it can do so without specifying the services to which it is attempting to enhance access.<sup>1725</sup>

429. MCI asserts that advanced services include services such as T-1 that would permit quick transmission of images such as X-rays necessary to provide medical services such as remote consulting and diagnosis.<sup>1726</sup> BellSouth asserts that they include the transport of data, video and imaging at speeds up to 1.544 Mbps, access to the Internet, distance learning, and many telemedicine services.<sup>1727</sup> Frontier states that services such as Asynchronous Transfer Mode (ATM) and ISDN technology are advanced services but asserts that they should not qualify for support.<sup>1728</sup> CCV asserts that it provides advanced services in different projects including: Interactive broadband networks providing high speed, point-to-point data and video transmission; a fiber optic system that provides multi-point data transmission among various users; broadband communications networks using cable modems and an ATM backbone to provide video and high speed data services including full access to library resources and the Internet; and point-to-point data transfer at 3 to 4 Mbps.<sup>1729</sup>

430. The comments of several commenters, including Alliance for Public Technology, BellSouth, Frontier, MCI, and USTA give support to the concept that advanced services include,

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<sup>1722</sup> Alaska PSC comments at 3-4.

<sup>1723</sup> *See, e.g.*, Sprint NPRM comments at 23.

<sup>1724</sup> *See, e.g.*, USTA NPRM comments at 12.

<sup>1725</sup> *See* CCV NPRM comments at 5.

<sup>1726</sup> MCI comments at 19.

<sup>1727</sup> BellSouth comments at 23.

<sup>1728</sup> Frontier NPRM comments at 5.

<sup>1729</sup> CCV NPRM comments at 7-11.

at the least, the additional services supported under sections 254(c)(3) and 254(h)(1).<sup>1730</sup>

431. LCI expresses doubt about whether access to advanced services for rural health care providers would be technically feasible or economically reasonable.<sup>1731</sup> It contends that mandating additional advanced services would involve substantial new investments that may not be sound.<sup>1732</sup>

432. USTA contends that the marketplace will efficiently deploy advanced services notwithstanding Commission action.<sup>1733</sup> USTA expects that, by bringing the rates for health care providers in rural areas to a level comparable to urban rates, the Act will create the market dynamics necessary to provide these same services to entire rural communities via the most efficient technology. Thus, USTA expects that increased marketplace demand and competition will ensure that rural communities will have access to a technologically advanced network in an efficient and effective manner.<sup>1734</sup>

433. Internet Access. Several commenters strongly endorse universal service support for toll-free Internet access.<sup>1735</sup> American Telemedicine asserts that rural health care providers should have access to the Internet at rates comparable to those charged in urban areas and that this toll-free access "should be a national priority."<sup>1736</sup> HHS urges the Commission to support Internet access "at local calling rates for rural health care providers."<sup>1737</sup> Nurse Practitioners agrees that local dial-up access, without long distance charges, should be available as a health

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<sup>1730</sup> Alliance for Public Technology comments at 30-31; BellSouth NPRM comments at 23; Frontier NPRM comments at 5; MCI comments at 19; USTA NPRM comments at 12.

<sup>1731</sup> LCI comments at 13 (stating that "only transmission capabilities of 1.544 Mbps should be provided to all rural health care providers as part of the universal service support system).

<sup>1732</sup> LCI comments at 13.

<sup>1733</sup> USTA comments at 41.

<sup>1734</sup> USTA comments at 41.

<sup>1735</sup> See, e.g., AAMC comments at 1, 2; AHA comments at 1 (urging the Commission to adopt recommendations of Advisory Committee including Internet access); American Telemedicine comments at 4; APHA comments at 1, 3-5 (stating that telecommunications access, including to Internet applications, is important to public health); Congressional January 10 *ex parte* at 2 (strongly urging that Internet access be made "available at local rates (or, if feasible, toll free)"); HHS comments at 2; Nebraska Hospitals comments at 1 ("toll-free access to Internet is necessary to provide cost-effective use of numerous sources of medical information and to facilitate flow of health care-related information"); Alaska Telemedicine Project reply comments at 7; NTIA reply comments at 29; Scott & White reply comments at 1; Senate January 9 *ex parte* at 2 (stating that these three Senators support local-toll rates for Internet access).

<sup>1736</sup> American Telemedicine comments at 4.

<sup>1737</sup> HHS comments, transmittal letter at 2.



care service to all Americans.<sup>1738</sup> Nebraska Hospitals asserts that toll-free access to the Internet is necessary to provide cost-effective use of the numerous sources of medical information and to facilitate the flow of health care-related information.<sup>1739</sup>

434. Some commenters describe specific impediments to, or suggest particular methods for, implementing full Internet access in rural areas. Wyoming PSC reports that Internet access in rural areas is usually by modem and often at speeds as low as 1200 bps because of the "continuing extensive use of analog carrier in rural local loops."<sup>1740</sup> Wyoming PSC asserts that this situation persists because 1) ISPs are not responsible for the local loop upgrades that would allow higher speed access, and 2) LECs are reluctant to upgrade loops because of higher costs and lower subscriber density in rural exchanges.<sup>1741</sup> NACCHO reports that approximately 75 percent of local health departments are not "on-line."<sup>1742</sup> American Telemedicine recommends that in implementing the policy of toll-free Internet access for "all health care providers," and contends that to achieve this objective, the Commission should consider a variety of approaches including: auctions for the establishment of local Internet "points of presence" throughout the country; special 800-number Internet access; wireless Internet access using cellular, satellite, or other wireless applications at local call rates; and special incentives to ILECs possibly including exemption from current restrictions on providing interLATA services.<sup>1743</sup>

435. Other commenters oppose supporting toll-free access to the Internet.<sup>1744</sup> SBC and Georgia PSC assert that support for toll-free Internet access is not necessary, because Internet service providers are expanding rapidly and the competitive marketplace will eliminate the perceived need to support such access.<sup>1745</sup> SBC, Georgia PSC, and Bell South contend that providing such support would reduce or "distort [Internet service providers'] incentives" to build their own facilities in rural markets.<sup>1746</sup> Contending that section 254 allows the equalization of

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<sup>1738</sup> Nurse Practitioners at 4.

<sup>1739</sup> Nebraska Hospitals at 1.

<sup>1740</sup> Wyoming PSC comments at 13.

<sup>1741</sup> Wyoming PSC comments at 13.

<sup>1742</sup> NACCHO comments at 2.

<sup>1743</sup> American Telemedicine comments at 4-5.

<sup>1744</sup> *See, e.g.*, Ameritech comments at 25-27 (arguing that there is no merit in toll-free Internet access); USTA comments at 40-41; BANX reply comments at 24; Georgia PSC reply comments at 29-30 (arguing that Internet access should not be supported because it is not a telecommunications service).

<sup>1745</sup> SBC comments at 10; Georgia PSC reply comments at 30.

<sup>1746</sup> BellSouth comments at 44; SBC comments at 10; Georgia PSC reply comments at 30.

rates but not charges, Ameritech, BellSouth PacTel, and USTA assert that any toll added to the telecommunications portion of Internet access is not eligible for support unless the toll rate for rural areas differs from that charged in urban areas.<sup>1747</sup>

436. Cost of Providing a Toll-free Connection to an Internet Service Provider. Nebraska Hospitals suggests that the lowest cost way to assure toll-free Internet access to hospitals may be to subsidize the local phone companies at an average toll rate of \$.20 per minute for an average of 15 hours access, per hospital, per month. Nebraska Hospitals estimates the cost of such a subsidy would be \$3,240.00 per month, or \$38,880.00 per year. Nebraska Hospitals cautions, however, that this subsidy to the phone company should continue only until toll-free access becomes available to the community.<sup>1748</sup> Wyoming PSC urges the Commission to examine the costs of providing toll-free internet access in a manner similar to that by which it reviews the costs of providing Extended Area Service (EAS). For example, EAS implementation traditionally requires that the loss of toll revenues from extending service areas for local calls be calculated and added into an EAS surcharge for the affected exchanges. Applying this paradigm to the provision of Internet access, Wyoming PSC suggests that the Commission ascertain the actual costs involved in providing Internet service to rural health care providers rather than approximating the costs based on the loss of embedded revenue as advocated by some commenters.<sup>1749</sup>

## **XII. INTERSTATE SUBSCRIBER LINE CHARGES AND CARRIER COMMON LINE CHARGES**

### **A. Overview**

437. The following is a summary of comments relating to interstate subscriber line charges and carrier common line charges.

### **B. LTS Payments**

#### **1. Comments**

438. Commenters generally agree with the Joint Board's conclusion that LTS constitutes an impermissible universal service support mechanism that must be modified to bring it into conformity with the Act.<sup>1750</sup> No party disputes the Joint Board's recommendation on this

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<sup>1747</sup> See Ameritech comments at 26; BellSouth comments at 42, 43; PacTel comments at 57-58; USTA comments at 40.

<sup>1748</sup> Nebraska Hospitals comments at 2.

<sup>1749</sup> Wyoming PSC comments at 13.

<sup>1750</sup> See, e.g., Ad Hoc comments at 28; Ameritech comments at 15; Bell Atlantic comments at 22.

point.<sup>1751</sup> Puerto Rico Tel. Co. cautions that carriers that receive LTS do not also contribute to it under the current system, but would be required to do so if such support was drawn from the new mechanisms.<sup>1752</sup> Puerto Rico Tel. Co. argues that this effect should be considered in designing the new mechanisms.<sup>1753</sup>

## C. SLC Caps

### 1. Comments

439. Many parties, particularly state consumer advocates and the SBA, agree with the Joint Board's recommendation to maintain or reduce the SLC for primary residential and single-line business lines.<sup>1754</sup> These parties generally assert that the level of the SLC affects the affordability of local service. NASUCA argues that, through the SLC, basic exchange customers bear an unreasonable share of interstate loop costs, so that the SLC must be reduced to comply with the mandates of section 254(k).<sup>1755</sup> Many other parties, however, argue that SLC caps should be increased.<sup>1756</sup> These parties generally contend that the most economically efficient way to recover non-traffic sensitive (NTS) costs such as loop costs is through a flat charge on the cost-causing end user.<sup>1757</sup> Some commenters state that lowering the SLC would increase implicit subsidies because the cap is set lower than NTS costs, resulting in a subsidy from high-volume users to low-volume users in contravention of the Act.<sup>1758</sup> A few commenters maintain

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<sup>1751</sup> Commenters' arguments challenging the Joint Board's proposed method for making LTS a part of the new universal service mechanism are addressed in section VII [high cost], *supra*.

<sup>1752</sup> Puerto Rico Tel. Co. comments at 11.

<sup>1753</sup> *Id.*

<sup>1754</sup> *See, e.g.*, CNMI comments at 40; DC OPC comments at 5; NASUCA comments at 2-7; SBA comments at 22-23; Texas PUC comments at 10-11; West Virginia Advocate comments at 13-16; CPI reply comments at 19-20. *See also* Richard Roth comments at 1-2 (arguing SLC should be abolished as a means of assisting low-income consumers).

<sup>1755</sup> NASUCA comments at 2-5.

<sup>1756</sup> *See, e.g.*, Ad Hoc comments at 25-26; AirTouch comments at 15; AT&T comments at 12; Bell Atlantic comments at 22; Citizens Utilities comments at 20; CSE Foundation comments at 15; MCI comments at 14-15; PacTel comments at 27-29; SBC comments at 36; Sprint comments at 16-17; U S WEST comments at 21; USTA comments at 22; ACTA reply comments at 4-6; GTE reply comments at 3-4.

<sup>1757</sup> *See, e.g.*, AirTouch comments at 14 (asserting that flat charge ensures that customers pay no more than full cost of facility); MCI comments at 16 (favoring flat rate because reducing SLC would unjustifiably burden interexchange carriers with rate increase); PacTel comments at 27-29 (supporting flat charge because reducing SLC would unfairly shift burden of unrecovered basic service costs to CCL).

<sup>1758</sup> *See, e.g.*, Ad Hoc comments at 22-26; Citizens Utilities comments at 22; PacTel comments at 28-29; SBC comments at 14.

that the Commission should consider SLC cap issues in its pending access reform proceeding rather than in this proceeding.<sup>1759</sup>

## **D. CCL Charges**

### **1. Comments**

440. Most parties agree with the Joint Board's recognition that the usage-sensitive CCL charge represents an inefficient way to recover largely NTS loop costs.<sup>1760</sup> Some parties argue that the usage-sensitive CCL charges are an implicit subsidy from high-volume users to low-volume users that should be eliminated to comply with the Act.<sup>1761</sup> Some agree with the Joint Board's alternative of converting the CCL charge to a per-line charge.<sup>1762</sup> Others, however, find fault with the Joint Board's proposal to assess a per-line CCL charge against the PIC, claiming that assessing the charge against only IXCs would not be competitively neutral.<sup>1763</sup> GSA argues that the usage-based CCL charge is economically inefficient and should be eliminated altogether.<sup>1764</sup> A number of parties assert that the Commission should address modifications to the CCL charge structure in our pending access charge reform proceeding, rather than in this proceeding.<sup>1765</sup>

## **XIII. ADMINISTRATION OF SUPPORT MECHANISMS**

### **A. Overview**

441. The following is a summary of the comments relating to the issue of the administration of the universal service support mechanisms.

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<sup>1759</sup> See, e.g., Bell Atlantic comments at 23; CompTel comments at 17; Georgia PSC reply comments at 34-35; Time Warner reply comments at 20-21.

<sup>1760</sup> See, e.g., Ameritech comments at 16; AT&T comments at 11; CSE Foundation comments at 14; GTE comments at 41; Interactive Service Ass'n comments at 2-3; Sprint comments at 16; United Utilities comments at 8; USTA reply comments at 5.

<sup>1761</sup> See, e.g., CSE Foundation comments at 14; GTE comments at 40; WorldCom comments at 36-38.

<sup>1762</sup> See, e.g., CSE Foundation comments at 14; GTE comments at 40-41; ITAA comments at 3; Sprint comments at 16; CPI reply comments at 19-20; USTA reply comments at 5.

<sup>1763</sup> See, e.g., Ameritech comments at 16; AT&T comments at 11; WorldCom comments at 38; ACTA reply comments at 4-5.

<sup>1764</sup> GSA comments at 3-4.

<sup>1765</sup> See, e.g., AT&T comments at 10; MFS comments at 34; Minnesota Coalition comments at 43-44; Time Warner reply comments at 19-20.

## B. Mandatory Contributors to the Support Mechanisms

### 1. Comments

442. Mandatory Contributors. Several commenters to the Recommended Decision agree that "all telecommunications carriers that provide interstate telecommunications services" must contribute to the support mechanism and state that this definition should be construed broadly to increase the funding base and reduce the contribution burden on any particular category of carrier.<sup>1766</sup> Very few commenters, however, list types of carriers that should be required to contribute.<sup>1767</sup> Arch states that a broad base of funding does not necessarily ensure "equitable and nondiscriminatory" contributions. Arch asserts that if Congress had only intended to ensure a broad base of funding, it would have required all carriers to contribute to the support mechanisms.<sup>1768</sup> Four commenters approve of adopting a method similar to one used to identify contributors to the TRS fund, under which the Commission would identify an illustrative list of "interstate telecommunications," to identify mandatory contributors.<sup>1769</sup> One of these commenters, LCI, cautions that the list should not be considered exhaustive.<sup>1770</sup> On the other hand, Utah PSC counters that the Joint Board's recommended list is overly inclusive and renders almost all telecommunications services interstate.<sup>1771</sup> Illinois CC argues that access service should not be included in the list of "interstate telecommunications" because it is not offered directly to the public.<sup>1772</sup> Keystone Communications argues that because section 254 does not define "telecommunications carrier," the Commission should apply the definition of "common carrier" or "carrier" contained in section 153(10), as opposed to providing an illustrative list of specific types of entities that must contribute.<sup>1773</sup>

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<sup>1766</sup> See, e.g., GCI comments at 7; Georgia Dept. of Admin. Services comments at 4; NASTD comments at 4; USTA comments at 15; Washington UTC comments at 3; WorldCom comments at 40; Motorola reply comments at 18.

<sup>1767</sup> See Alliance for Distance Education comments at 1 (including telephone companies, cable television companies, direct broadcast satellite companies, local multipoint distribution service companies and wireless telecommunications service companies); GCI comments at 7 (including local, long distance, competitive access providers, cellular, pay phone, enhanced service providers).

<sup>1768</sup> Arch reply comments at 2.

<sup>1769</sup> See, e.g., DIRECTV comments at 5; GE Americom comments at 1-2; Keystone Communications comments at 2-3; LCI comments at 2.

<sup>1770</sup> LCI comments at 2.

<sup>1771</sup> Utah PSC comments at 5. See also Georgia PSC reply comments at 35-36.

<sup>1772</sup> Illinois CC comments at 6.

<sup>1773</sup> Keystone Communications comments at 3.

443. Several commenters argue that specific types of carriers should not be required to contribute to the support mechanism.<sup>1774</sup> Some commenters assert that contributions should only be required from facilities-based service providers, because resellers of such services already contribute to universal service through their payments to facilities-based carriers.<sup>1775</sup> Rural Electric Coop. adds that, since rural electric cooperatives providing telecommunications services to rural and high cost areas further universal service goals, they should not be required to contribute.<sup>1776</sup> Keystone Communications contends that broadcast transmission providers should be exempt from contribution because contributions would increase the cost to distribute new programming and would lead to less U.S. programming export.<sup>1777</sup> DIRECTV argues that multichannel video programming distributors (MVPDs) do not offer telecommunications because their subscribers do not specify the points between which the service is transmitted, or the video or audio services that MVPDs carry.<sup>1778</sup> Rather, DIRECTV alleges that while customers select the video and audio programming that they desire, the MVPD is solely responsible for selecting the programming options available to subscribers.<sup>1779</sup> GE Americom states that satellite space segment operators should be exempt from contribution because they do not benefit from the ability to connect to the PSTN and their private contracts prohibit them from recovering their contributions from their customers.<sup>1780</sup> GE Americom also notes that many customers use satellite space segments for video programming and that such activity should not trigger an obligation to contribute.<sup>1781</sup> Finally, GE Americom states that satellite companies should not contribute to the support mechanism because they will compete against foreign satellite companies not subject to similar requirements.<sup>1782</sup>

444. To the Public for a Fee. Several commenters question the Joint Board's recommendation regarding the interpretation of "to the public for a fee."<sup>1783</sup> GE Americom and

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<sup>1774</sup> See, e.g., DIRECTV comments at 2-4; GE Americom comments at 7-9; Keystone Communications comments at 6; Rural Electric Coop. comments at 2; UTC comments at 4-5.

<sup>1775</sup> See Keystone Communications comments at 6.

<sup>1776</sup> Rural Electric Coop. comments at 2.

<sup>1777</sup> Keystone Communications comments at 6.

<sup>1778</sup> DIRECTV comments at 2-4.

<sup>1779</sup> DIRECTV comments at 4.

<sup>1780</sup> GE Americom comments at 7-8.

<sup>1781</sup> GE Americom comments at 8.

<sup>1782</sup> GE Americom comments at 8-9.

<sup>1783</sup> See, e.g., Ad Hoc comments at 15-18; APPA comments at 5-9; DIRECTV comments at 4-5; GE Americom comments at 4-6; Illinois CC comments at 6; ITAA comments at 5-7; LCRA comments at 5-6; PanAmSat comments at 5-6; Rural Electric Coop. comments at 2; UTC comments at 8-9.

a few other satellite companies argue that the provision of service to select customers on a private contract basis does not constitute service "directly to the public or to such classes of users as to be effectively available to the public."<sup>1784</sup> APPA states that "directly to the public or to such classes of users as to be effectively available to the public" should be interpreted to mean service offered on a virtually unrestricted or common carriage basis.<sup>1785</sup> Ad Hoc contends that the courts have stated that where a carrier makes individualized decisions about whether and on what terms to deal with customers, the carrier will not be a common carrier.<sup>1786</sup> Rural Electric Coop. states that companies that lease excess capacity to other telecommunications carriers should not be required to contribute to the support mechanism, because they do not provide telecommunications services "directly" to the public or to subscriber end users.<sup>1787</sup> UTC notes that if contributions are based on gross revenues net of payments to other carriers and if wholesalers are not considered "telecommunications carriers," CAPs, IXC's, and other new entrants will not be allowed to subtract payments to wholesalers from their gross revenues and there will be no net effect on the total size of the support mechanism because CAPs, IXC's, and other new entrants will include in their contribution the revenues that would have otherwise been attributable to wholesalers.<sup>1788</sup> UTC further argues that "for a fee" should be interpreted as "for a profit," and that entities that do not offer services on a for-profit commercial basis, such as utility and pipeline companies, should not be required to contribute.<sup>1789</sup> LCRA requests that the Commission clarify that cost sharing for the construction and operation of private telecommunications networks does not constitute "telecommunications services" "for a fee."<sup>1790</sup>

445. International/Foreign Services. COMSAT, a satellite telecommunications company, argues that it should not be required to contribute to the universal service support mechanisms, because the terms of its license bar it from offering domestic interstate service.<sup>1791</sup>

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<sup>1784</sup> GE Americom comments at 4-6. *See also* DIRECTV comments at 4-5; PanAmSat comments at 5; UTC comments at 8-9.

<sup>1785</sup> APPA comments at 5-9. *See also* GE Americom comments at 4-6; UTC comments at 8; BSA ITAA joint reply comments at 3; IXC Communications reply comments at 2-4.

<sup>1786</sup> Ad Hoc comments at 16-17 *citing National Association of Regulatory Utility Commissioners v. FCC*, 553 F.2d 601, 608 (D.C. Cir. 1976) (*NARUC II*). *See also* IXC Communications reply comments at 2-3; UTC reply comments at 3-6.

<sup>1787</sup> Rural Electric Coop. comments at 2. *See also* APPA comments at 9 (discouraging electric utilities and other entities from leasing facilities to other carriers would delay competition); IXC comments at 4; UTC comments at 7-10.

<sup>1788</sup> UTC comments at 10.

<sup>1789</sup> UTC comments at 4-5.

<sup>1790</sup> LCRA comments at 7-8. *See also* Ad Hoc comments at 21-22; APPA comments at 5-10; UTC comments at 6; UTC reply comments at 2-3. *See Local Competition Order*, 11 FCC Rcd. at 15,990.

<sup>1791</sup> COMSAT comments at 2-4.

COMSAT admits that it does offer limited service to US territories and possessions, but contends that this minimal involvement in the interstate market should not be sufficient to trigger the obligation to contribute. COMSAT adds that, if it is found to provide interstate telecommunications services, its contribution base should be limited to its revenues derived from interstate telecommunications services.<sup>1792</sup> CNMI argues that COMSAT should be required to contribute because it provides interstate services between Pacific points such as Guam, the Commonwealth of Northern Mariana Islands, and Hawaii and the mainland.<sup>1793</sup> PanAmSat contends that international communications are not "interstate telecommunications" in that they do not originate and terminate within the U.S. or its territories or possessions and questions why "international/foreign" was included in the list of interstate services.<sup>1794</sup> PanAmSat states that, in some limited cases, some of its satellites that are used to provide international service may include connections between U.S. points. For example, an international network may include multiple terminals located in the U.S. that may communicate with one another. PanAmSat asks that the Commission clarify that such incidental traffic not be considered interstate traffic and notes that it may have no way of tracking this traffic.<sup>1795</sup>

446. Information Service Providers. Many commenters agree with the Joint Board's recommendation that information and enhanced service providers should not contribute to the support mechanism.<sup>1796</sup> Keystone Communications states that information and enhanced service providers do not provide "telecommunications services" and should not be required to contribute. In addition, Keystone Communications asserts that if an ISP or ESP also provided telecommunications services its contributions should only be assessed against its revenues derived from the provision of telecommunications services.<sup>1797</sup> ITAA contends that there are only two situations in which an entity that provides enhanced service would be required to contribute: (1) when a common carrier provides both basic telecommunications and enhanced

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<sup>1792</sup> COMSAT comments at 4.

<sup>1793</sup> CNMI comments at 34.

<sup>1794</sup> PanAmSat comments at 3. We note that COMSAT filed with the Commission an Application for Review, or in the Alternative, a Waiver, in the matter of TRS, and the Americans with Disabilities Act of 1990, CC Docket No. 90-571, on March 17, 1995, regarding the Commission's contribution requirements for the interstate TRS Fund. In that filing, COMSAT argues that it should not be considered a carrier that provides interstate telecommunications services because it is largely prohibited from serving the U.S. domestic market. If the Commission disagrees, COMSAT requests that its contribution to TRS be based only on its interstate revenues. COMSAT's Application for Review is still pending.

<sup>1795</sup> PanAmSat comments at 4.

<sup>1796</sup> See, e.g., BSA comments at 5; Commercial Internet Exchange comments at 2; ITI comments at 4; Keystone Communications comments at 4; NetAction comments at 4; Netscape comments at 2-3; Business Software Alliance reply comments at 1.

<sup>1797</sup> Keystone Communications comments at 4. See also ITAA comments at 9.



services; and (2) when a non-carrier ESP provides a stand-alone telecommunications service.<sup>1798</sup> LCI points to "Voice over the Internet" and argues that ISPs and ESPs should be required to contribute because these providers will increasingly compete with providers of basic telephone services.<sup>1799</sup> Interactive Services Ass'n requests that the Commission clarify that Internet access service is an information service, not a telecommunications service.<sup>1800</sup> Netscape proposes that the Commission assess universal service contribution requirements on ISPs and OSPs<sup>1801</sup> to the extent they provide the telecommunications services and facilities used for Internet access because such an approach would "better service the interests of educational technology by eliminating a compelling ground for appellate delay and possible reversal."<sup>1802</sup> Senator Stevens staff argues that information services are inherently telecommunications services because information services are offered via "telecommunications."<sup>1803</sup> Finally, ITAA finds no need for the Commission to re-evaluate which services qualify as information services,<sup>1804</sup> while NetAction agrees that review of the definition would be appropriate.<sup>1805</sup>

447. CMRS Providers. BANM asserts that the Commission provided no notice, as required by the APA, that the issue of CMRS contributions to state support mechanisms would be considered by the Joint Board and that the Commission had expressly not referred to the Board issues relating to state universal service programs.<sup>1806</sup> BANM asserts that the Joint Board exceeded its authority when it stated that section 332(c) does not preclude states from requiring CMRS providers to contribute to state support mechanisms and the Commission cannot lawfully adopt that position.<sup>1807</sup> In addition, several commenters aver that states lack the authority to

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<sup>1798</sup> ITAA comments at 10. *See also* ITI comments at 4 (including only ISPs or ESPs that separately provide telecommunications services as common carriers).

<sup>1799</sup> LCI comments at 3. *See also* CWA reply comments at 13.

<sup>1800</sup> Interactive Services Ass'n comments at 2.

<sup>1801</sup> Online Service Providers (OSPs) like America Online and the Microsoft Network package proprietary content with Internet access. *See* Netscape comments at 6.

<sup>1802</sup> Netscape reply comments at 3.

<sup>1803</sup> *See* Letter from Timothy A. Peterson, FCC, to William F. Caton, FCC, memorializing meeting between FCC and Sen. Stevens' staff, dated March 13, 1997.

<sup>1804</sup> ITAA comments at 10-11.

<sup>1805</sup> NetAction comments at 4. *See also* Netscape comments at 3-4.

<sup>1806</sup> BANM comments at 2.

<sup>1807</sup> BANM comments at 4-5.

assess contributions on CMRS providers.<sup>1808</sup> PageMart asserts that section 332(c) explicitly limits state universal service obligations to CMRS carriers, the services of which are a substitute for land line telephone service in a given state.<sup>1809</sup> Celpage states that this condition has not been met in any state<sup>1810</sup> and that state assessments will force carriers to raise rates, which would represent unlawful rate regulation, and would create barriers to entry.<sup>1811</sup> BANM notes that section 601(c)(1) states that the "Act . . . shall not be construed to modify, impair or supersede Federal, State or local law unless expressly so provided," and contends that nothing in the Act explicitly repeals section 332(c).<sup>1812</sup> PageMart adds that wireless services are inherently interstate and thus not subject to state assessments<sup>1813</sup> and that requiring CMRS providers to contribute to state and federal programs will subject them to double taxation.<sup>1814</sup> On the other hand, Kentucky PSC notes that although the services of wireless carriers are not a direct substitute for land line services, digital technology, new marketing alliances and strategies and bundling of service options will allow CMRS providers to compete for a larger share of the local market. For those reasons, Kentucky PSC plans to require CMRS providers to contribute to the state's new universal service program, and it urges the Commission not to undermine Kentucky PSC's proposed program.<sup>1815</sup> California PUC adds that CMRS providers are required to contribute to California's universal service program because it believes cellular customers benefit from universal service in the same way as land line customers. Furthermore, California PUC adds that cellular carriers may be eligible to receive universal service support.<sup>1816</sup>

### **C. Other Providers of Interstate Telecommunications**

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<sup>1808</sup> See, e.g., BANM comments at 6-10; Celpage comments at 6-7; CTIA comments at 13-16; Nextel comments at 3-6; PageMart comments at 2-3; PageNet comments at 14; AirTouch reply comments at 35-38; Arch reply comments at 4-6; UTC reply comments at 7-8.

<sup>1809</sup> PageMart comments at 2-3. See also AirTouch comments at 32-33; APC comments at 11-12; BANM comments at 6; CTIA comments at 14-16; Nextel comments at 3-4; PCIA reply comments at 21-23; Vanguard reply comments at 7-8.

<sup>1810</sup> Celpage comments at 7. See also CTIA comments at 15 (contending Congress intended to prevent states from regulating CMRS unless subscribers have no alternative means of obtaining basic telephone service); Nextel comments at 4.

<sup>1811</sup> Celpage comments at 8.

<sup>1812</sup> BANM comments at 7.

<sup>1813</sup> PageMart comments at 3. See also Broadband PCS Alliance comments at 5.

<sup>1814</sup> PageMart comments at 3.

<sup>1815</sup> Kentucky PSC comments at 35-36. See also California PUC reply comments at 3 (including CMRS providers in California state program).

<sup>1816</sup> California PUC reply comments at 3-4.

## 1. Comments

448. Keystone Communications asserts that it would not serve the public interest to require "other providers of telecommunications," such as private network operators, to contribute, because they: (1) do not substantially benefit from the PSTN or do not access the PSTN for the provision of their services; (2) derive little or no direct benefit from universal service; or (3) do not offer telecommunications services for a fee directly to the public.<sup>1817</sup> Keystone Communications adds that many "other providers" are small businesses that would have difficulty paying large contributions.<sup>1818</sup> Ad Hoc urges the Commission to clarify that private carriers will only be required to contribute to the extent, if any, that they provide interstate telecommunications services on a common carrier basis.<sup>1819</sup> Ad Hoc asserts that private carriers may provide telecommunications to a discrete group of customers for a fee without incurring common carrier or universal service obligations.<sup>1820</sup> It states that the courts have held that where a carrier makes individualized decisions about whether and on what terms to deal with customers, the carrier will not be a common carrier.<sup>1821</sup> UTC adds that requiring private carriers, which privately lease their facilities, to contribute would not encourage facilities-based competition.<sup>1822</sup> RBOC Payphone Coalition argues that payphone service providers, LEC and non-LEC, are aggregators exempt from the definition of telecommunications carrier.<sup>1823</sup> They add that, consistent with the *Local Competition Order* and Commission payphone orders, payphone service providers should be considered as end-users for universal service purposes and should not be required to contribute to or receive support from universal service support mechanisms.<sup>1824</sup>

### D. The *De Minimis* Exemption

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<sup>1817</sup> Keystone Communications comments at 5. *See also* ITAA comments at 5; LCRA comments at 5-6; Orion Atlantic comments at 5-6; UTC comments at 3.

<sup>1818</sup> Keystone Communications comments at 5.

<sup>1819</sup> Ad Hoc comments at 15-16. *See also* ITAA comments at 7-9; Orion Atlantic comments at 5-7.

<sup>1820</sup> Ad Hoc comments at 15-18. *See also* ITAA comments at 5-7; LCRA comments at 5-6; PanAmSat comments at 5-6; UTC comments at 8-10.

<sup>1821</sup> Ad Hoc comments at 16-17. *See also* GE Americom comments at 4-6 (citing Commission precedent that found sale of transponder capacity by domestic satellite operators on private contract basis as not constituting common carriage).

<sup>1822</sup> UTC comments at 9-10.

<sup>1823</sup> Letter from Michael K. Kellogg, RBOC Payphone Coalition, to William F. Caton, FCC, dated April 15, 1997 (RBOC Payphone Coalition *ex parte*).

<sup>1824</sup> RBOC Payphone Coalition *ex parte* at 2-3.

## 1. Comments

449. Rural Electric Coop. suggests that eligibility for the *de minimis* exemption should be based on the "size of" telecommunications services relative to the company's total business rather than the overall size of the provider, which we interpret to mean the percentage of revenues derived from telecommunications services relative to overall revenue.<sup>1825</sup> Teleport argues that, in addition to exempting carriers if the administrator's cost of collecting the contribution exceeds the amount of the contribution, public policy would favor exempting small carriers whose own costs of contributing to the support mechanism exceed the amount of the contribution that would be sent.<sup>1826</sup> Metricom urges the Commission to exempt unlicensed Part 15 providers because their contributions to universal service would likely be insignificant while the corresponding cost of collection would be high. Metricom asserts that the administrator would need to identify which Part 15 services are telecommunications services, identify the unlicensed providers, and calculate the contribution due.<sup>1827</sup>

450. Special Treatment for Carriers Ineligible to Receive Support. PageMart asserts that it is inequitable to require carriers that cannot receive support to contribute at the same rate as support-eligible carriers.<sup>1828</sup> Specifically, it notes that paging companies are not capable of providing all of the designated services and thus are ineligible to receive support. PageMart asserts that it would be unfair to require paging companies to compete against other companies that may be able to lower their prices as a result of receiving support funds. PageMart suggests that carriers that are ineligible to draw from the support mechanism should receive a 50 percent discount on what they otherwise would have had to contribute.<sup>1829</sup> PageNet suggests that an ineligible carrier's contribution be established in proportion to how many of the core services it is able to provide, or, alternatively, from how many services it can receive benefits.<sup>1830</sup> Arch contends that paging companies are particularly unable to afford high contributions because they have low profit margins and customer demand for this service is particularly sensitive to price.<sup>1831</sup> Celpage argues that assessing contributions against paging companies represents an

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<sup>1825</sup> Rural Electric Coop. comments at 3.

<sup>1826</sup> Teleport comments at 11.

<sup>1827</sup> Metricom comments at 4-6.

<sup>1828</sup> PageMart comments at 7-8. *See also* Arch comments at 3-6; Celpage comments at 9-10; PageNet comments at 10-13; PNPA comments at 3-5; AirTouch reply comments at 25; Centennial reply comments at 3-4 (claiming unless its CMRS is a substitute for land line service, CMRS operator should make reduced contribution).

<sup>1829</sup> PageMart comments at 7-8. *See also* Celpage comments at 10 (CMRS contributions should be on a weighted basis); PNPA comments at 6; Arch reply comments at 3-4.

<sup>1830</sup> PageNet comments at 12-13.

<sup>1831</sup> Arch comments at 5-6.

unconstitutional violation of paging carriers' due process and equal protection rights because paging carriers will derive no benefit from the universal service support mechanisms.<sup>1832</sup>

## **E. Scope of the Commission's Authority Over the Universal Service Support Mechanisms**

### **1. Comments**

451. Statutory Authority. Commenters disagree on whether intrastate telecommunications revenues should be included when calculating carrier contributions to the support mechanisms and on whether the Commission has the statutory authority to include those revenues.<sup>1833</sup> Sprint argues that the Act authorizes contributions based on inter- and intrastate telecommunications revenues because section 254(d) instructs the Commission to require every telecommunications carrier that provides interstate telecommunications services to contribute, but does not specify or prohibit specific funding bases.<sup>1834</sup> AT&T notes that state universal service plans are discretionary and complementary to the federal program. AT&T argues that this structure forecloses any contention that Congress intended the federal mechanism to be

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<sup>1832</sup> Celpage comments at 3-5. *See also* PNPA comments at 5-6.

<sup>1833</sup> Many commenters favor contributions based on interstate and intrastate telecommunications revenues. *See, e.g.,* Alaska PUC comments at 10-11; ALTS comments at 10-11; AT&T comments at 5; BellSouth comments at 10-11; Brooklyn Public Library comments at 8-9; Cathey, Hutton comments at 8; CompTel comments at 6-9; CPI comments at 6; Fred Williamson comments at 6; GSA comments at 11; GTE comments at 66; LCI comments at 3; MCI comments at 10-11; MFS comments at 40; NCTA comments at 28-29; NRPT comments at 6; New Jersey Advocate comments at 9; PacTel comments at 23-24; PageMart comments at 3-4; PageNet comments at 13; PNPA comments at 7; Roseville Tel. Co. comments at 2-5; RTC comments at 29-31; Teleport comments at 11; Time Warner comments at 8; United Utilities comments at 4; USTA comments at 17; Vermont PSB comments 1; West Virginia Consumer Advocate comments at 16; WorldCom comments at 41; ACTA reply comments at 6; Ad Hoc reply comments at 18-21; CWA reply comments at 12-13; Florida PSC reply comments at 2-3; KMC reply comments at 6; Maine PUC reply comments at 2 (arguing not unlawful to base on inter- and intrastate revenues); U S West reply comments at 7-10; Vanguard reply comments at 8-9; Letter from Joel Shifman, Maine PUC and Peter Bluhm, Vermont PSB, to William F. Caton, FCC, dated April 9, 1997. Many commenters, however, favor contributions based on interstate revenues only. *See, e.g.,* Alabama PSC comments at 2-3; ALLTEL comments at 7; BANM comments at 12; Bell Atlantic comments at 4-7; Broadband PCS Alliance comments at 5; California PUC comments at 15-19; Celpage comments at 12; Cincinnati Bell comments at 6-7; Frontier comments at 14; Illinois CC comments at 7-8; Iowa Utilities Board comments at 5; Kansas CC comments at 6; Kentucky PSC comments at 2-3; Maryland PSC comments at 11; Missouri PSC comments at 4-7; New York DPS comments at 3-8; New York DOE comments at 1; Nextel comments at 7-8; NYNEX comments at 12; Puerto Rico Tel. Co. comments at 29-30; SBC comments at 18; SNET comments at 2-3; Utah PSC comments at 3; Western Alliance comments at 40-41; Bell Atlantic NYNEX joint reply comments at 5-6; Colorado PUC reply comments at 5; Georgia PSC reply comments at 37-42. In addition, State Commissioners McClure and Schoenfelder dissent from the Joint Board's recommendation that the Commission assess contributions on interstate and intrastate telecommunications. Dissenting Statement of Commissioners McClure and Schoenfelder on Funding of Universal Service, filed April 23, 1997.

<sup>1834</sup> Sprint comments at 9. *See also* ALTS comments at 10; AT&T comments at 6; CompTel comments at 6-7; GTE comments at 66-67; LCI comments at 4-5; Ad Hoc reply comments at 19.

based only on interstate revenues.<sup>1835</sup> Several commenters, however, assert that because section 254(d) explicitly identifies providers of "interstate telecommunications services" as contributors to the federal support mechanisms while section 254(f) explicitly identifies providers of "intrastate telecommunications services" as contributors to state support mechanisms there is no indication that Congress intended to change the current jurisdictional responsibilities between federal and state governments over inter- and intrastate revenues.<sup>1836</sup> New York DPS also argues that because Senate versions of the 1996 Act that explicitly placed interstate, intrastate, and international carriers within the category of mandatory contributors were not adopted, Congress did not intend to grant the Commission authority to include intrastate revenues within the contribution base.<sup>1837</sup> Puerto Rico Tel. Co. adds that section 254(h)(1)(B) also indicates that intrastate revenues should not be included because that section states that the Commission shall set interstate discounts and states intrastate discounts.<sup>1838</sup>

452. Commenters also disagree on whether section 2(b) precludes the Commission from including intrastate revenues in the contribution assessment base. Bell Atlantic asserts that section 2(b), which expressly withholds from the Commission jurisdiction over "charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communications services," prohibits the Commission from assessing contributions based on intrastate revenues.<sup>1839</sup> Maryland PSC claims that the Commission's including intrastate revenues would represent a change in current jurisdictional responsibilities between states and the Commission. The PSC states that section 601(c) requires that any changes in jurisdictional responsibilities be based on explicit statutory language, which it alleges is absent from section 254.<sup>1840</sup> Maryland PSC notes that earlier versions of the Act that would have revised section 2(b) to allow the Commission to assess contributions on intrastate revenues, were not adopted and contends that this omission indicates an intent not to grant the Commission jurisdiction over

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<sup>1835</sup> AT&T comments at 6-7.

<sup>1836</sup> *See, e.g.*, Alabama PSC comments at 2; Bell Atlantic comments at 5-6; California Department of Consumer Affairs comments at 35-36; Illinois CC comments at 7; Kansas CC comments at 6-7; Kentucky PSC comments at 2-3; Maryland PSC comments at 15; Missouri PSC comments at 4-5; New York DPS comments at 4-5; NYNEX comments at 13-15; Ohio PUC comments at 21-22; Puerto Rico Tel. Co. comments at 29-30; Utah PSC comments at 3; Georgia PSC reply comments at 38-40.

<sup>1837</sup> New York DPS comments at 5-6. *See also* Georgia PSC reply comments at 40.

<sup>1838</sup> Puerto Rico Tel. Co. comments at 29.

<sup>1839</sup> Bell Atlantic comments at 5-6. *See also* Illinois CC comments at 7; Kansas CC comments at 7; Maryland PSC comments at 12; New York DPS comments at 7-8; Ohio PUC comments at 22-23; Utah PSC comments at 3-4; Georgia PSC reply comments at 37-42.

<sup>1840</sup> Maryland PSC comments at 15. *See also* Kansas CC comments at 7; New York DPS comments at 7; Bell Atlantic NYNEX joint reply comments at 5-7.

intrastate revenues.<sup>1841</sup> In addition, Maryland PSC claims that the Commission cannot advance broad federal policy if the effect is to disregard section 2(b)'s express jurisdictional limitations.<sup>1842</sup> Georgia PSC states that even if the Commission believes it has the authority to assess contributions against intrastate revenues, it should refrain from including intrastate revenues in the assessment base in order to prevent implementation delays caused by litigation surrounding this issue.<sup>1843</sup> On the other hand, Roseville Tel. Co. argues that inclusion of intrastate revenues would not represent federal intrastate ratemaking which would violate section 2(b). Roseville Tel. Co. asserts that the Commission would merely be calculating a federal charge on both inter- and intrastate revenues.<sup>1844</sup> Agreeing, Vermont PSB states there is a difference between the collection of funds to finance universal service programs and regulating the rates and conditions of intrastate service.<sup>1845</sup>

453. Equitable Effects. Commenters also disagree on whether inclusion of intrastate telecommunications revenues in the contribution base would be equitable. Sprint argues that contributions should be based on both inter- and intrastate telecommunications revenues because the support mechanism will largely support services that are intrastate in nature and intrastate service providers will be among the mechanism's primary recipients.<sup>1846</sup> Sprint adds that as technologies converge, there will be a blurring between interstate and intrastate services, that will make it increasingly difficult to identify and audit interstate revenues only.<sup>1847</sup> PageMart states that including intrastate revenues will broaden the funding base, thus lessening the burden on all carriers, including small carriers, and will eliminate the incentive to classify revenues as intrastate.<sup>1848</sup> Bell Atlantic, however, asserts that intrastate ratepayers derive no benefit from

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<sup>1841</sup> Maryland PSC comments at 13.

<sup>1842</sup> Maryland PSC comments at 14.

<sup>1843</sup> Georgia PSC reply comments at 38.

<sup>1844</sup> Roseville Tel. Co. comments at 5.

<sup>1845</sup> Vermont PSB comments at 5. *See also* Ad Hoc reply comments at 19.

<sup>1846</sup> Sprint comments at 7-9. *See also* ALTS comments at 12; GTE comments at 69-70 (arguing that because support will fund offset reductions in intrastate and interstate rates, basing contributions on both inter- and intrastate revenues is reasonable); NCTA comments at 30; PageNet comments at 13-14; PNPA comments at 7; Time Warner comments at 9-10; USTA comments at 17; Vermont PSB comments at 5; KMC reply comments at 6.

<sup>1847</sup> Sprint comments at 7-9. *See also* ALTS comments at 12-13; AT&T comments at 5; BellSouth comments at 10-11 (stating sometimes jurisdiction of call is determined by customer's declaration or reporting, such as private line or special access, or is not determinable, such as Feature Group A); Brooklyn Public Library comments at 8-9; CPI comments at 10; GTE comments at 68; NCTA comments at 31; Time Warner comments at 10; Vermont PSB comments at 6; WorldCom comments at 42-43; GSA reply comments at 5-6.

<sup>1848</sup> PageMart comments at 3-4. *See also* ALTS comments at 12-13; GTE comments at 67; MCI comments at 10-11; PageNet comments at 13-14; USTA comments at 17; Ad Hoc reply comments at 20-21.

sending a portion of their payments to subsidize service in other states and should not be used to "export" money to other states.<sup>1849</sup> Roseville Tel. Co. counters that all carriers benefit from the availability of a universal and ubiquitous telephone system, regardless of relative jurisdictional revenues, so spreading the contribution over all telecommunications services more closely matches costs and benefits than an interstate-only assessment.<sup>1850</sup> Roseville Tel. Co. also asserts that most carriers may experience a decrease in interstate revenues as a result of competition, so including intrastate revenues will help stabilize the funding base and prevent funding shortfalls.<sup>1851</sup> Roseville Tel. Co. adds that the current USF bases contributions on both the inter- and intrastate jurisdictions, because contributions are assessed on the number of presubscribed lines, which include intrastate assignments.<sup>1852</sup>

454. Vermont PSB argues that basing contributions on interstate revenues only produces inequitable and discriminatory results for small states with small populations.<sup>1853</sup> Vermont PSB alleges that states with smaller populations tend to place more calls out of state and hence would be disproportionately burdened if only interstate revenues were assessed. Additionally, using only interstate revenues for the federal support mechanism would most likely result in states assessing only intrastate revenue for state funds. This would also disadvantage states with smaller populations because they tend to have less intrastate revenue.<sup>1854</sup>

455. Several commenters voice concerns over the impact on state support programs of including intrastate revenues in the assessment base for the interstate fund. Kentucky PSC asserts that basing contributions to the federal fund on inter- and intrastate telecommunications revenues is not equitable because it will cause a double assessment of intrastate revenues that will hinder state programs to address universal service issues within state borders.<sup>1855</sup> Delaware PSC states that its concern is that no matter what revenue base is used, Delaware will be a net-payor state and that Delaware's contributions to the federal support mechanisms may impede that state's ability to provide universal service support within the state.<sup>1856</sup> LCI counters that the

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<sup>1849</sup> Bell Atlantic comments at 7.

<sup>1850</sup> Roseville Tel. Co. comments at 2-3. *See also* CPI comments at 11; MFS comments at 41; United Utilities comments at 4.

<sup>1851</sup> Roseville Tel. Co. comments at 4-5. *See also* AT&T comments at 7.

<sup>1852</sup> Roseville Tel. Co. comments at 5. *See also* RTC comments at 30.

<sup>1853</sup> Vermont PSB comments at 7-8. *See also* RTC comments at 31; USTA comments at 17-18 (asserting that basing on interstate only will burden rural and high cost states).

<sup>1854</sup> Vermont PSB comments at 8.

<sup>1855</sup> Kentucky PSC comments at 2-3. *See also* Alabama PSC comments at 2-3; Bell Atlantic comments at 7; California Department of Consumer Affairs comments at 36; Celpage comments at 12; Kansas CC comments at 6.

<sup>1856</sup> Delaware PSC comments at 4-6.



inclusion of intrastate revenues will not preclude states from establishing their own complementary universal service plans.<sup>1857</sup> USTA adds that when establishing their plans, states have the authority to assess inter- and intrastate revenues to calculate contributions to state support mechanisms.<sup>1858</sup> In addition, CPI asserts that assuming fixed state and federal support mechanisms and fixed net inter- and intrastate telecommunications revenues, using both revenue bases for both federal and state contribution bases will result in lower contribution percentages for both programs.<sup>1859</sup> To avoid the double assessment problem, NYNEX suggests that the inclusion of intrastate revenues be made voluntary. States that do not want their intrastate revenues to be included would not receive support for intrastate costs from the federal support mechanism.<sup>1860</sup>

456. Competitive Neutrality. Furthermore, commenters disagree on whether the inclusion of intrastate revenues would have competitively neutral effects. Sprint argues that use of interstate revenues only is not competitively neutral because it exempts the majority of LEC revenues and places a disproportionate burden on IXC's, which Sprint claims is inconsistent with section 254(b)(4). Sprint also argues that the use of interstate revenues only will have detrimental economic consequences for interstate service providers. Sprint claims that if the overall contribution percentage is too high, it will depress the demand for interstate services, because the elasticity of demand for long distance services is greater than the elasticity of demand for local services.<sup>1861</sup> Sprint contends that because of this and the fact that LECs will receive support funds, LECs will not be forced to behave efficiently.<sup>1862</sup> CompTel argues that intrastate revenues must be included to avoid disproportionately burdening some classes of providers.<sup>1863</sup> CompTel argues that including intrastate revenues would not expand the base of contributing carriers and would better represent a carrier's total participation in the

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<sup>1857</sup> LCI comments at 5.

<sup>1858</sup> USTA comments at 18. *See also* Cathey, Hutton comments at 8 (stating only include inter- and intrastate revenues in federal program if states can act similarly); New Jersey Advocate comments at 9; Ohio PUC comments at 26 (stating if Commission determines it has authority to assess intrastate revenues, states must be given same authority); Colorado PUC reply comments at 5-6 (stating if Commission assesses intrastate revenues, it should issue declaratory ruling that states have similar authority over interstate revenues). *But see* Alabama PSC comments at 3-4 (noting states' jurisdiction over interstate revenues is not entirely clear).

<sup>1859</sup> CPI comments at 8.

<sup>1860</sup> NYNEX comments at 12. *See also* GSA reply comments at 6 (arguing if contributions limited to interstate revenues only, mechanism should support only interstate portion of services); MCI reply comments at 6 (arguing if contributions limited to interstate revenues, mechanism should support no more than 25 percent of loop costs).

<sup>1861</sup> *See* Jerry Hausman, Timothy Tardiff, & Alexander Belinfante, *The Breaking Up of AT&T and Changes in Telecommunications Regulation: What are the Lessons?*, 83 Am. Econ. Rev. 178 (1993).

<sup>1862</sup> Sprint comments at 7-9. *See also* Roseville Tel. Co. comments at 3-4.

<sup>1863</sup> CompTel comments at 7. *See also* LCI comments at 3-4; MFS comments at 41; Roseville Tel. Co. comments at 3; WorldCom comments at 43.

telecommunications market.<sup>1864</sup> If intrastate revenues were excluded, carriers with equal revenues would pay different contributions simply because one primarily provides interexchange services. CompTel asserts that the distortion caused by excluding intrastate revenues is significant. CompTel states that RBOCs will hold a significant advantage when entering the interexchange market because 75 percent of their total resources are intrastate and would be shielded from funding obligations.<sup>1865</sup>

457. On the other hand, Bell Atlantic contends that basing contributions on both inter- and intrastate revenues violates the principle of competitive neutrality because it would advantage intrastate-only carriers vis-a-vis intrastate carriers that happen to provide even a single interstate service.<sup>1866</sup> Georgia PSC adds that this competitive distortion might encourage companies to create new corporate entities that only provide intrastate services.<sup>1867</sup> California Department of Consumer Affairs agrees that basing contributions on both inter- and intrastate revenues is not competitively neutral or nondiscriminatory because consumers of carriers that provide inter- and intrastate services will pay more for intrastate services than consumers of carriers that provide intrastate services only.<sup>1868</sup> CPI argues that if only interstate revenues are calculated to determine federal contributions and a state does not implement a program, a carrier with intrastate revenues will support neither federal or state support mechanisms.<sup>1869</sup> Finally, COMSAT argues that revenues derived from international/foreign services should not be included in the federal contribution base.<sup>1870</sup>

458. Recovery. NYNEX claims that the Commission cannot require carriers to include intrastate revenues in their contribution bases because it cannot assure that carriers will be able to recover the intrastate portion of their contribution through intrastate rate increases.<sup>1871</sup> Ohio PUC agrees and asserts that the Commission has no authority to require states to make exogenous adjustments to their respective intrastate price cap plans to take into account federal

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<sup>1864</sup> CompTel comments at 7-8. *See also* ALTS comments at 12.

<sup>1865</sup> CompTel comments at 7-8.

<sup>1866</sup> Bell Atlantic comments at 6. *See also* Cincinnati Bell comments at 6-7; Illinois CC comments at 8; Missouri PSC comments at 5-6; Utah PSC comments at 4; Bell Atlantic NYNEX joint reply comments at 7; Georgia PSC reply comments at 37.

<sup>1867</sup> Georgia PSC reply comments at 38.

<sup>1868</sup> California Department of Consumer Affairs comments at 37.

<sup>1869</sup> CPI comments at 9.

<sup>1870</sup> COMSAT comments at 4.

<sup>1871</sup> NYNEX comments at 25.

contributions based on intrastate revenues.<sup>1872</sup> Celpage suggests that, if intrastate revenues are included, carriers should be able to offset their federal contributions by payments made to state universal service support funds.<sup>1873</sup> GTE cautions that if the support mechanism is not large enough to fund offsetting reductions in both state and federal rates and is only sufficient to eliminate some portion of the support generated by interstate access, only interstate revenues should be included.<sup>1874</sup>

## **F. Basis for Assessing Contributions**

### **1. Comments**

459. Gross Revenues Net of Payments to Other Carriers. Several commenters support the Joint Board's recommendation to base contributions on gross revenues derived from telecommunications services net of payments to other carriers for telecommunications services (net telecommunications revenues).<sup>1875</sup> PageNet agrees with the Joint Board that this formula eliminates the double payment problem and closely approximates a value-added-based contribution.<sup>1876</sup> TRA stresses that the net telecommunications revenues method is a competitively neutral way to eliminate the double payment problem and cites its use in allocating the cost of establishing telecommunications numbering administration arrangements and in recovering shared number portability costs.<sup>1877</sup> TRA also finds that the net telecommunications revenues method would be easy to administer since the Commission already collects common carrier regulatory fees on this basis. Ad Hoc adds that some economists consider the value-added method to be less complex, more competitively neutral, and based on sounder underlying principles than other assessment methods.<sup>1878</sup> TRA and Telco assert that resale carriers are constrained by market pressures from recovering contributions through rate increases.<sup>1879</sup> TRA, however, finds that contributions based on net telecommunications revenues

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<sup>1872</sup> Ohio PUC reply comments at 17-18.

<sup>1873</sup> Celpage comments at 12.

<sup>1874</sup> GTE comments at 69-70.

<sup>1875</sup> See, e.g., CPI comments at 7; Frontier comments at 14; GCI comments at 7; ITAA comments at 2; MFS comments at 40; PageMart comments at 7; PageNet comments at 10; PNPA comments at 3; Texas PUC comments at 11; TRA comments at 5-6; KMC reply comments at 5; NTIA reply comments at 10-15; WorldCom reply comments at 8.

<sup>1876</sup> PageNet comments at 10. See also CPI comments at 7-8.

<sup>1877</sup> TRA comments at 7-8.

<sup>1878</sup> Ad Hoc reply comments at 8.

<sup>1879</sup> See Telco comments at 3-5; TRA comments at 9.

help alleviate this concern.<sup>1880</sup> MFS proposes that the Commission clarify that only revenues derived from telecommunications services would be subject to contributions. Revenues derived from other services, such as enhanced or private services, would be exempt.<sup>1881</sup>

460. Bell Atlantic states that if contributions are assessed on net telecommunications revenues, carriers must be allowed to pass through their contributions to all of their customers, both retail and wholesale, in order to ensure that wholesale customers, for example, purchasers of unbundled elements and resellers, make an equitable and nondiscriminatory contribution.<sup>1882</sup> If not, Bell Atlantic contends, contributions assessed in this method would discourage new entrants from building their own facilities.<sup>1883</sup> In addition, they assert that the Commission must give any contribution requirement "exogenous treatment"<sup>1884</sup> by allowing price cap LECs to increase their price cap indices by the full amount of the contribution or allow them to assess a separately identified universal service fund charge on access customers.<sup>1885</sup> Excel, on the other hand, argues that facilities-based carriers should not be allowed to pass through any of their contributions in wholesale rates charged to resellers. It argues that such a result would not be equitable or nondiscriminatory because wholesalers will be required to contribute to the support mechanisms directly.<sup>1886</sup> Rural Electric Coop. asserts that the net telecommunications revenues

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<sup>1880</sup> TRA comments at 9.

<sup>1881</sup> MFS comments at 40. *See also* DIRECTV comments at 6.

<sup>1882</sup> Bell Atlantic comments at 8-9. *See also* GTE comments at 33-34; RT comments at 10 (alleging LECs must be able to pass on the cost of contribution to access and local service customers); TDS comments at 9-10. *But see* Telco comments at 4-5 (alleging that it would not be competitively neutral for facilities-based carriers to inflate interconnection, access charges or wholesale rates to recover their entire contribution and suggesting that carriers should look to sales to end-users for recovery); USTA comments at 43-45.

<sup>1883</sup> Bell Atlantic comments at 10. *See also* BANM comments at 11; SBC comments at 14-15.

<sup>1884</sup> Under our price cap rules for incumbent local exchange carriers, most changes in a carrier's costs of providing regulated services are treated as "endogenous," which means they do not result in adjustments to the carrier's price cap indices. Price cap carriers may claim adjustments to their indices based on exogenous costs, *i.e.*, costs triggered by administrative, legislative, or judicial actions that are beyond their control if those costs are not otherwise accounted for in the price cap formula. Such costs are defined as "exogenous." The Commission has found that those types of cost changes should be treated "exogenously" to ensure that price cap regulation does not lead to unreasonably high or unreasonably low rates. *See Policy and Rules Concerning Rates for Dominant Carriers, Second Report and Order*, 5 FCC Rcd 6786 (1990); 47 C.F.R. § 61.45(d).

<sup>1885</sup> Bell Atlantic comments at 10. *See also* Ameritech comments at 30 (arguing contributions should be regarded as exogenous cost changes for price cap carriers and, if intrastate support is involved, require state rate freeze plans to allow flow through); NYNEX comments at 22-23 (suggesting the Commission could establish new rate elements, such as a surcharge on interstate revenues, or new rate elements, such as per-subscriber charges); TDS comments at 11 (arguing that state regulators may not allow rural LECs to raise local rates so rural LECs may be unable to recover); GTE reply comments at 48 (arguing ILECs are constrained through regulatory process from adjusting rates).

<sup>1886</sup> Excel comments at 16-17.

contribution method disadvantages utility companies that do not provide services to other carriers but merely provide physical facilities.<sup>1887</sup> BANM contends that this method allows resellers and other carriers, who predominantly use the facilities of others, to base contributions on their profit margins and to subtract payments that are effectively a substitute for building their own networks from their gross revenues, while facilities-based providers may not subtract the costs of building and maintaining their networks from their gross revenues.<sup>1888</sup> AirTouch asserts that the net telecommunications revenues method disadvantages carriers with higher prices per unit and may distort consumer choices because it is a traffic-sensitive measure.<sup>1889</sup> NYNEX claims that Congress intended interstate carriers to fund the support mechanism and most likely had the existing IXC's in mind. Thus, NYNEX states the result of net telecommunications revenues, which, it contends, shifts a large percentage of the funding burden to LECs, is contrary to congressional intent.<sup>1890</sup> KMC counters that, based on NYNEX's numbers, basing contributions on retail revenues would require IXC's to bear over 80 percent of the costs of a support mechanism that primarily benefits LECs, which it asserts would not be equitable.<sup>1891</sup>

461. Celpage suggests that paging companies' contributions be assessed on the basis of net income, i.e., gross revenues minus all expenses, because many CMRS carriers currently operate at a loss as a result of high infrastructure costs.<sup>1892</sup> They assert that high contributions may cause many paging companies, especially start-up companies, to go bankrupt or to sell their businesses.<sup>1893</sup> APC asserts that any revenues-based measure will be difficult to enforce as carriers begin to offer bundled services.<sup>1894</sup> For example, APC asks how a carrier should allocate its revenues when it offers a customer a subsidized phone with a bundled service of basic CMRS

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<sup>1887</sup> Rural Electric Coop. comments at 2. *See also* BANM comments at 10 (claiming net telecommunications revenues disadvantages carriers that provide service wholly or predominantly over their own facilities).

<sup>1888</sup> BANM comments at 10-11. *See also* Cincinnati Bell comments at 4-5 (arguing carriers such as IXC's and resellers will contribute based on value/profit margin while LECs will contribute based on gross revenues); Minnesota Coalition comments at 37-38; SBC comments at 15-16; SNET comments at 3; USTA comments at 16; BellSouth reply comments at 5; CWA reply comments at 11-12.

<sup>1889</sup> AirTouch reply comments at 22-23.

<sup>1890</sup> NYNEX comments at 18-20.

<sup>1891</sup> KMC reply comments at 5-6.

<sup>1892</sup> Celpage comments at 10-12. *See also* Aerial comments at 5 (arguing all carriers should be able to net out debt and fraud); Broadband PCS Alliance comments at 2-3 (citing cost of network build-out, license costs, fraudulent usage of communications facilities, discounts, promotional offerings and bad debt).

<sup>1893</sup> Celpage comments at 12.

<sup>1894</sup> APC comments at 7-8. *See also* Broadband PCS Alliance comments at 4; USTA comments at 16.

plus voicemail and caller ID.<sup>1895</sup> GTE adds that the net telecommunications revenues method will require carriers and the administrator to keep records that track all intermediate transactions.<sup>1896</sup>

462. Retail Revenues. Several carriers advocate assessing contributions based on retail telecommunications revenues.<sup>1897</sup> Bell Atlantic defines retail revenues as the revenues received from end users, including their subscriber line charges.<sup>1898</sup> U S West claims that tracking retail revenues would be administratively easy if retail revenues were defined as revenues received from customers who are not telecommunications providers.<sup>1899</sup> Proponents of the retail revenues model claim that using retail revenues would avoid assessing double contributions on the revenues and would be more competitively neutral.<sup>1900</sup> Sprint argues that basing contributions on retail revenues would be explicit and simple to apply because the mechanism utilizes one less step than the net telecommunications revenues method. Sprint argues that LECs will pass through a portion of their contribution to the support mechanism to IXC's through higher access charges and IXC's will compensate by adjusting their long distance rates. It argues the retail-revenues method eliminates this pass-through step and allows each carrier to recover its contribution through an explicit surcharge on end user's bills.<sup>1901</sup> Bell Atlantic asserts that the ultimate impact on end users is the same whether contributions are based on retail or net telecommunications revenues, assuming carriers are allowed to pass through all of their contributions. Furthermore, Bell Atlantic claims most wholesale carriers also provide retail services, so wholesale carriers will not be exempt from contribution and basing contributions on retail revenues would be less complex than net telecommunications revenues.<sup>1902</sup> Bell Atlantic asserts that the Commission does not track gross revenues from non-dominant carriers and does not receive comprehensive reports regarding payments between carriers, so the Commission's

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<sup>1895</sup> APC comments at 8.

<sup>1896</sup> GTE comments at 39.

<sup>1897</sup> See, e.g., ALLTEL comments at 6; AT&T comments at 9; BANM comments at 10; Bell Atlantic comments at 10-11; BellSouth comments at 13-14; Cincinnati Bell comments at 5; Citizens Utilities comments at 28-29; GTE comments at 40; IXC comments at 4; Minnesota Coalition comments at 39; NRPT comments at 6; NYNEX comments at 18; RTC comments at 34-35; SBC comments at 17; Sprint comments at 9-10; TCA comments at 8; TDS comments at 11-12; USTA comments at 16; Vermont PSB comments at 10-11; Bell Atlantic NYNEX joint reply comments at 3-4; CWA reply comments at 11; GSA reply comments at 7-8; Teleport reply comments at 8.

<sup>1898</sup> Bell Atlantic comments at 10-11.

<sup>1899</sup> U S West comments at 45.

<sup>1900</sup> See, e.g., Sprint comments at 9-10.

<sup>1901</sup> Sprint comments at 9-10. See also Bell Atlantic NYNEX joint reply comments at 3-4.

<sup>1902</sup> Bell Atlantic comments at 11. See also U S West comments at 42-45.

unfamiliarity with the retail model cannot justify our preferring net telecommunications revenues to retail.<sup>1903</sup> BANM asserts that assessing contributions based on carriers' retail revenues is more competitively neutral than the net telecommunications method because facilities-based and non-facilities-based carriers would contribute in proportion to the number of customers they serve.<sup>1904</sup>

463. Gross Revenues. Alliance for Distance Education suggests that contributions be based on carrier gross income.<sup>1905</sup> Cincinnati Bell argues that if retail revenues are not adopted, the Commission should adopt contributions based on gross revenues to ensure that all carriers contribute on the same basis.<sup>1906</sup> Ad Hoc, however, claims that basing contributions on gross revenues is an economically irrational method to calculate contributions because it would double count certain revenues.<sup>1907</sup>

464. Per-line. APC suggests that contributions should be based on objective factors, such as a carrier's number of subscribers or number of lines because such a measure would not be subject to manipulation.<sup>1908</sup> AirTouch states that each subscriber to the PSTN, excluding those eligible for subsidies, could make a flat monthly payment toward universal service.<sup>1909</sup> Airtouch claims that a per-subscriber or per-access line contribution would be more efficient than a net telecommunications revenues contribution because it argues that fixed charges are less distortive of consumer choices than usage-based charges.<sup>1910</sup> Aerial adds that, for providers that are not eligible for universal service support, contributions should be based on the number of lines to which they are connected to the PSTN.<sup>1911</sup> Broadband PCS Alliance favors a lines-based

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<sup>1903</sup> Bell Atlantic comments at 11.

<sup>1904</sup> BANM comments at 11.

<sup>1905</sup> Alliance for Distance Education comments at 1.

<sup>1906</sup> Cincinnati Bell comments at 5-6. *See also* BellSouth comments at 11.

<sup>1907</sup> Ad Hoc reply comments at 7-8. For example, under the gross revenues model, a reseller would include revenues derived from the provision of services to customer A. The facilities-based carrier that sells transmission capacity to the reseller would also include the revenues derived from the reseller for the reseller's purchase of transmission capacity to serve customer A. Thus, the revenues derived from customer A's call would be counted twice, once against the reseller and once against the facilities-based carrier.

<sup>1908</sup> APC comments at 9. *See also* Aerial comments at 2-3 (basing on per-line or number of dialable numbers is easily quantifiable and understood); Broadband PCS Alliance comments at 2-3; Sprint PCS comments at 10-11 (arguing in favor of a charge based on the number of subscribers served); AirTouch reply comments at 15-16 (arguing in favor of a charge based on each access line).

<sup>1909</sup> AirTouch reply comments at 15-16.

<sup>1910</sup> Airtouch reply comments at 15-20.

<sup>1911</sup> Aerial comments at 3.

measure over a revenues-based measure because CMRS carriers do not separate their revenues on an inter- and intrastate basis.<sup>1912</sup> AirTouch, however, notes that a per-minute contribution would be difficult to administer because most LECs bill on a flat-rate basis.<sup>1913</sup>

465. End-User Surcharge/Recovery. California Department of Consumer Affairs asserts that contributions should be disclosed and recovered through an explicit end-user surcharge.<sup>1914</sup> California Department of Consumer Affairs argues that a surcharge would not violate the statutory requirement that carriers contribute to the fund because even if contributions are based on gross revenues net of payments to other carriers, consumers will ultimately fund the support mechanism because most carriers will pass the cost of contribution to their subscribers. It claims that because the end result is the same, the Commission should mandate that carriers recover their contributions to the support mechanisms through an explicit end-user surcharge and provide more information to consumers about the services that they purchase.<sup>1915</sup> WorldCom asserts that anything other than a line item on a customer bill is an implicit charge that does not conform with the Act's express requirement of a "specific and predictable" support mechanism that is also "explicit and sufficient."<sup>1916</sup> AT&T contends that a surcharge, appearing as a line item on end users' bills, will require carriers to assess the cost of contribution proportionately across all of their services, rather than allowing them to allocate the cost of the subsidy strategically among their services.<sup>1917</sup> CompTel adds that prohibiting carriers from identifying that portion of consumer bills attributable to support contributions would violate their First Amendment rights and would serve no legitimate purpose other than keeping consumers "in the dark."<sup>1918</sup> AT&T asserts that an explicit surcharge will also prevent the support mechanism from "spinning out of control" by creating public pressure to keep the overall subsidy levels in

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<sup>1912</sup> Broadband PCS Alliance comments at 3-4.

<sup>1913</sup> AirTouch reply comments at 23-24.

<sup>1914</sup> California Department of Consumer Affairs comments at 38-40. *See also* ALLTEL comments at 8; Ameritech comments at 31; AT&T comments at 8; BellSouth comments at 15-16; GTE comments at 36; LCI comments at 14; MFS comments at 112-13; NYNEX comments at 23-24; PacTel comments at 20-23; PageNet comments at 16; RTC comments at 35-36; SBC comments at 11-14; TDS comments at 6-8; U S West comments at 45-46; USTA comments at 22; WorldCom comments at 40-41; ACTA reply comments at 6; AirTouch reply comments at 20-21; ALTS reply comments at 5-8; Bell Atlantic NYNEX joint reply comments at 2-3; California SBA reply comments at 4-5; KMC reply comments at 4; SBC reply comments at 2-3.

<sup>1915</sup> California Department of Consumer Affairs comments at 39-40. *See also* WorldCom comments at 40-41; ALTS reply comments at 6-8.

<sup>1916</sup> WorldCom comments at 41. *See also* SBC comments at 11-13; TDS comments at 7-8, U S West comments at 46; BellSouth reply comments at 3.

<sup>1917</sup> AT&T comments at 8-9. *See also* TDS comments at 7; U S West comments at 46-47; ALTS reply comments at 5-6; BellSouth reply comments at 3.

<sup>1918</sup> CompTel comments at 16-17. *See also* WorldCom comments at 41.



check.<sup>1919</sup> CompTel adds that if carriers were to include the cost of contribution in their charges for service, the contribution would be treated as revenue and would be subject to federal and state taxes, including support mechanism contributions.<sup>1920</sup> BellSouth states that a mandatory end-user surcharge would be easy to administer and would be competitively neutral because not all carriers are free to adjust rates, either because of contractual terms or state regulations.<sup>1921</sup> BellSouth recommends that each carrier would divide its contribution by its retail revenues in order to calculate the surcharge.<sup>1922</sup> PacTel states that, if the Commission prohibits carriers from recovering their contributions from their customers, the contribution would be an unconstitutional taking.<sup>1923</sup> TURN, however, argues that the support mechanism should not be financed through an end-user surcharge or through the SLC, because section 254 clearly stated that telecommunications carriers are responsible for the costs of the support mechanisms.<sup>1924</sup>

466. Universal Service Alliance does not advocate an end-user surcharge but states that the Commission should provide a specific and predictable means for carriers to recover their contributions and that failure to do so will render contributions implicit to consumers and will make it more difficult for carriers to make infrastructure investments.<sup>1925</sup> GE Americom requests that the Commission make clear that carriers may pass all costs of their contributions to their customers and that mandatory contributions constitute a substantial cause that would provide a "public interest" justification for a carrier's filing of tariff changes or making contract changes.<sup>1926</sup> PacTel requests that the Commission clarify paragraph 808 of the Recommended Decision and state that purchasers of unbundled elements may be charged for universal service contributions to the extent they are also providers of interstate services as long as such charges are separately stated and assessed in a nondiscriminatory manner.<sup>1927</sup> Telco adds that universal service contributions cannot be included in the rates for unbundled elements because they are not

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<sup>1919</sup> AT&T reply comments at 7.

<sup>1920</sup> CompTel comments at 16-17. *See also* AirTouch comments at 27-30 (including intrastate revenues requires significant coordination with states, such as full offset mechanisms in order to prevent double taxation); Vermont PSB comments at 10.

<sup>1921</sup> BellSouth comments at 15-16.

<sup>1922</sup> BellSouth comments at 16.

<sup>1923</sup> PacTel comments at 21.

<sup>1924</sup> TURN comments at 8-9.

<sup>1925</sup> Universal Service Alliance comments at 14-16. *See also* California SBA comments at 6-7.

<sup>1926</sup> GE Americom comments at 9-10. *See also* PacTel comments at 22-23; SBC comments at 13.

<sup>1927</sup> PacTel comments at 26-27.

a "cost" of providing the elements.<sup>1928</sup> NYNEX asserts that the Commission must enlist the cooperation of states to ensure that carriers may recover contributions that are based on intrastate revenues.<sup>1929</sup> On the other hand, the state Joint Board members assert that a mandated end-user surcharge would raise local rates and would usurp state commissions' "discretion to determine if the imposition of an end-user surcharge would render local rates unaffordable."<sup>1930</sup> CPI suggests that the Commission need not specify the means by which contributors to the support mechanisms will recover the contribution from customers.<sup>1931</sup> CPI argues that the universal service contribution is a cost of doing business, like any other, and the treatment of that cost should be left to individual contributors. Some contributors may seek approval to raise rates, while others may determine that competition will prevent them from passing the cost to customers.<sup>1932</sup> The state Joint Board members add that it would be "premature" to judge how carriers in the telecommunications market would choose to recover their contributions during the transition to competitive markets.<sup>1933</sup> CPI states that the Commission should not mandate recovery through an end-user surcharge, but should also not exclude contributions from a regulated company's cost of service.<sup>1934</sup> California PUC urges the Commission not to make any conclusions or findings that would inhibit states from collecting state contributions through an end-user surcharge.<sup>1935</sup> California SBA, citing the National Regulatory Research Institute, notes that several states, such as Arizona, California, Colorado, Connecticut, Idaho, Kansas, Maine and Utah, rely on end-user surcharges to fund state support programs.<sup>1936</sup>

467. Offset. SNET argues that a sound support mechanism would not include revenues from the support mechanism to calculate carrier contributions. For example, SNET contends that discounts received from the support mechanism for the provision of services to schools and libraries should be excluded.<sup>1937</sup> NYNEX contends that carriers will not receive the full amount of their discount if they are required to offset their discount against their

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<sup>1928</sup> Telco reply comments at 6-7.

<sup>1929</sup> NYNEX comments at 21.

<sup>1930</sup> State Members of the Federal-State Joint Board on Universal Service Comments on Recovery Mechanism for Universal Service Contributions at 1 (State Contributions Comments).

<sup>1931</sup> CPI reply comments at 15-17.

<sup>1932</sup> See also Letter from Thomas J. Long, TURN, to Chmn. Reed E. Hundt, FCC, dated March 4, 1997.

<sup>1933</sup> State Contributions Comments at 1.

<sup>1934</sup> CPI reply comments at 15-16.

<sup>1935</sup> California PUC comments at 13-15.

<sup>1936</sup> California SBA comments at 9.

<sup>1937</sup> SNET comments at 4.

contribution rather than receiving a reimbursement.<sup>1938</sup> Similarly, Western Alliance contends that carriers that receive support will not receive the full amount of support if they are required to contribute to the support mechanism. Western Alliance gives as an example the following: if a carrier is entitled to \$500,000.00 in support but is required to contribute \$75,000.00, it is effectively receiving \$425,000.00 in support.<sup>1939</sup> TCA, however, finds allowing carriers to offset their contributions reasonable.<sup>1940</sup> Excel argues that if resellers are unable to become "eligible carriers" and if facilities-based carriers are not required to pass through subsidies to resellers, resellers providing universal service supported services should receive credits to reduce their universal service contributions.<sup>1941</sup>

## **G. Administrator of the Support Mechanisms**

### **1. Comments**

468. Third Party. A majority of commenters suggest that universal service support should be administered by a non-governmental, neutral third party.<sup>1942</sup> Sprint agrees that all four criteria recommended by the Joint Board are essential. In particular, it argues that allowing an entity affiliated with one service provider or industry segment to control the assignment and use of critical public resources could give rise to anticompetitive behavior. Sprint further argues that even the appearance of bias might lead to allegations of discrimination and unfair competitive practices.<sup>1943</sup> Ameritech agrees and maintains it would be inappropriate to have any industry or beneficiary membership on the board of the administrator.<sup>1944</sup> WorldCom agrees that a universal service advisory board should recommend a permanent administrator and states that appointing a balanced and objective universal service advisory board is crucial to selecting a neutral third-party administrator.<sup>1945</sup>

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<sup>1938</sup> NYNEX comments at 24.

<sup>1939</sup> Western Alliance comments at 39-40.

<sup>1940</sup> TCA comments at 9.

<sup>1941</sup> Excel comments at 15-16.

<sup>1942</sup> See, e.g., ALTS comments at 19; AT&T comments at 26-27; Benton comments at 4; EDLINC comments at 19-20; GCI comments at 8; ITI comments at 3; New York Public Library comments at 3; North Dakota PSC comments at 3; PacTel comments at 60; Sprint comments at 10-11; Telco comments at 13; Teleport comments at 12; Texas PUC comments at 13; WorldCom comments at 42; ACTA reply comments at 6; Ameritech reply comments at 7.

<sup>1943</sup> Sprint comments at 10-11. See also ALTS comments at 18-19; Telco comments at 13.

<sup>1944</sup> Ameritech reply comments at 7.

<sup>1945</sup> WorldCom comments at 42. See also GCI comments at 8 (approving creation of advisory board to select Administrator).

469. While some commenters agree that a third party should administer the support mechanisms, a few suggest modifications to the Joint Board's recommendation. EDLINC suggests that the Administrator's board of directors should contain representatives from schools and libraries.<sup>1946</sup> EarthLink asserts that the Joint Board's four criteria are overly broad and would preclude ISPs, who do not contribute to or receive support from the support mechanisms, from the permanent Administrator position.<sup>1947</sup> CNMI states that the universal service advisory board should administer the support mechanism.<sup>1948</sup> Benton suggests that the Administrator of the support mechanism work with a universal service marketing group to develop competitively neutral marketing strategies and to alert eligible individuals and institutions to the support mechanism.<sup>1949</sup> GE Americom requests the Commission to require any Administrator to keep carrier revenue information confidential.<sup>1950</sup>

470. National Exchange Carrier Association. A few commenters argue that NECA should be appointed the permanent Administrator of the support mechanisms. TCA states that NECA's experience make it the best choice for the permanent Administrator.<sup>1951</sup> Although NYNEX does not recommend NECA, it agrees that NECA should be considered for the fund Administrator position if it makes changes to its membership and governance to eliminate the perception that it is biased towards ILECs. NYNEX suggests that NECA should separate its tariff-advocacy function from any of its support mechanism administration functions.<sup>1952</sup>

471. Administration of Support at the State Level. New York DOE questions whether any federal Administrator will be able to collect information and distribute funds at the state level.<sup>1953</sup> Colorado PUC agrees and argues that state PUCs should administer the support allocated to each state because they are knowledgeable about states' needs and have mechanisms in place to administer and implement the program.<sup>1954</sup> Colorado LEHTC recommends that states

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<sup>1946</sup> EDLINC reply comments at 19.

<sup>1947</sup> Letter from Sky Dayton, EarthLink Network, to William F. Caton, FCC, dated February 10, 1997.

<sup>1948</sup> CNMI comments at 37-38.

<sup>1949</sup> Benton comments at 4.

<sup>1950</sup> GE Americom comments at 11.

<sup>1951</sup> TCA comments at 9. *See also* Fred Williamson comments at 6; Iowa UB comments at 1-2; Minnesota Coalition comments at 44-46; PacTel comments at 60 (agreeing that NECA should be appointed temporary Administrator); RTC comments at 52; Western Alliance comments at 41-43; Wyoming PSC comments at 14.

<sup>1952</sup> NYNEX comments at 41-42. *See also* Frontier comments at 14; Iowa UB comments at 2; PacTel comments at 60.

<sup>1953</sup> New York DOE comments at 1.

<sup>1954</sup> Colorado PUC reply comments at 4. *See also* Colorado LEHTC reply comments at 4.

be given the option of administering federal support in their states.<sup>1955</sup>

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<sup>1955</sup> Colorado LEHTC reply comments at 4.